THE

# NATURALIST's POCKET MAGAZINE;

OR,

## COMPLEAT CABINET

OF THE

## CURIOSITIES AND BEAUTIES

OF

## NATURE.

CONTAINING,

ELEGANT COLOURED PRINTS

OF

| | |
|---|---|
| BIRDS, | INSECTS, |
| FISHES, | QUADRUPEDS, |
| FLOWERS, | SHELLS, |

AND OTHER NATURAL PRODUCTIONS.

WITH

## DESCRIPTIONS.

VOL. I.

LONDON:
Printed for HARRISON, CLUSE, and Co.
N° 78, Fleet Street.
1799.

BRITISH MUSEUM
15
MAY

# PREFACE.

THE almost unexampled encouragement which this work has, in it's origin, received from the public, affords a pleasing presage that, with the continuance of those unremitted attentions which have already been bestowed by the editors, it may long continue to experience the same liberal support, and at length become a perfect Museum of Natural Curiosities.

In this small volume, alone, we may venture to assert, the most intelligent naturalist will discover somewhat that is new, and not altogether unworthy of his attention; while, to readers in general, it cannot fail to afford a very considerable fund of information and entertainment.

If some of our descriptions should appear short, to those who are unapprised of the frequent paucity of materials, we are persuaded that the best judges will still oftener wonder how we have been enabled to give so much.

As

As our work is of a general nature, we have studiously avoided that technicality of science which is so apt to discourage those who read chiefly for amusement; without, in the mean time, neglecting to introduce whatever may be essential, in this respect, to readers of every description.

By the favour of a few friends, long resident in distant countries, and particularly by the friendship of a gentleman who resided many years in a highly respectable official capacity at the British settlement in New South Wales, we have not only been enabled to present the naturalist with several non-descript articles in this our first volume, but are qualified to promise, from the same source, a great variety of other rare productions, both in the animal and vegetable kingdoms.

To the many, therefore, who have been generously pleased with our labours, we may safely engage, that they are not likely to find the subsequent volumes less interesting, than what has been so highly honoured with very general regard.

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OURAN OUTANG.

Published January 1, 1792, by Harrison, Cluse & Co. No. 73, Fleet Mar

# OURAN OUTANG.

THERE are few animals of which naturalists appear to know decidedly so little, as of that which is commonly denominated the Ouran Outang. The various accounts seem, in general, better calculated to amuse frivolous readers, than to gratify any rational enquirer after the true knowledge of nature.

Under the name Ouran Outang, or words varying a little in orthography, but of similar sound, different animals of the ape kind have been described; and, on the contrary, animals evidently varying from each other no more than the generality of other animals of a single species are commonly found to vary, have obtained a great diversity of appellations.

The circumstance of the Ouran Outang's near approach to the human form, may account for the exaggerations into which travellers

vellers have been tempted; and, from speculative writers of natural history, like the ingenious Goldsmith, and in this science the still more ingenious and less speculative Buffon, who record what they have heard and read, as well as what they have seen and examined, we must not expect more than they had means to give. These, and others, treat it not only as a native of Africa, but of the East Indies.

Linnæus seems to have considered it as the Satyr of the ancients; and Dr. Tyson, who has given to the world a minute and accurate anatomical description, names it the Pigmy. Brisson calls it l'Homme de Bois, or the Man of the Woods; Bosman, in his Voyage to Guinea, the Smitten; Purchas, the Drill; Tulpius, the Satyrus Indicus, or Indian Satyr; Bontius, the Troglodyte; and Pyrard, who says it is called Baris in Guinea, the Jocko and the Enjocko. In Barbet's Guiney, it is also named Barrys, as well as Quojas Marrou; and, by Battel, Barris and Pongo. In Scotin's print, mentioned by Edwards, it is called

called the Chimpanzee; and, according to Kjoep, as quoted by Linnæus, it is in some parts of the East-Indies named the Kukurlacko.

From all this diversity, naturalists have made their selections: Buffon presents the Ouran Outang as of two species, the Pongo and Jocko; Edwards gives us, as synonimous names, the Satyr, Wild Man, Pigmy, Orang Outang, Chimpanzee, &c. Goldsmith, following Buffon and others, calls it the Ouran Outang, or Wild Man of the Woods; and Pennant, who in his Synopsis of Quadrupeds makes but one species of the Pongo and Jocko, describes it as the Great Ape.

With this superabundance for our choice, we have thought it sufficient for the present purpose, to adopt only the most popular general appellation: though, as our figure is taken from the same stuffed animal, now deposited in the British Museum, as that of Edwards represented in a different position, and

and which, he remarks, was precisely of the same species as that formerly dissected and described by Dr. Tyson under the name of the Pigmy, we could full as well have satisfied our own minds, by calling it, with him, the Pigmy. Nor, perhaps, on considering what is advanced by Buffon relative to the extreme youth of both these animals, neither of them more than about two years of age, and these almost the only ones which appear to have been ever actually and accurately examined by any experienced naturalists in Europe, should we have greatly objected to the name of a young Satyr, with Linnæus.

Leaving, however, the decision, to future discovery from facts, rather than increasing, by conjecture, the present confusion, we must refer our readers to the various authors, for the particulars of what they have advanced on the subject of these animals in general; after presenting them with what is compleatly ascertained respecting those which were examined by Tyson, and by Buffon and Edwards.

The

The animal described by Dr. Tyson was brought from Angola in Africa. His body was covered with coal-black hair; not fine and short, intermixed like the fur of brutes, but all of a sort, like human hair; except that, on the upper lip and chin, as well as about the pubes, it was greyish and somewhat different. The hair behind was extremely thick; but, before, it was rather thin, and in some places almost bare: nor was there any hair on the face, hands, or soles of the feet. The face was like that of a man; but the forehead was larger, and the head more round. The upper and lower jaw were less prominent than those of the monkey. The ears, the teeth, the breasts, and navel, as well as the bending of the arms and legs, greatly resembled those of man; and, in short, the animal, at first view, seemed to present a figure entirely human.

On a closer survey, however, several comparative imperfections of form began to be manifest. The most obvious differences were, the flatness of the nose, lowness of the fore-

head,

head, and want of prominence in the chin. The ears were also too large; the eyes too nearly approached each other; and the interval between the nose and mouth was too great. The thighs were too short, and the arms too long; the palms of the hands were too narrow, being as long as the feet; the thumbs were too short; and the toes were as long as the fingers: the feet, in fact, too much resembled hands, and were occasionally used for the same purposes; and the animal had too great a bend on his haunches.

On an anatomical examination, though the animal had thirteen ribs, being one more than in man, there still appeared such an astonishing similitude, that it seemed wonderful he should want the higher faculties. The tongue, and all the organs of the voice, were the same, and yet the animal was dumb; the brain, too, seemed precisely like that of man, and yet he was destitute of reason: an evident proof, as Buffon finely observes, that no disposition of matter will give mind; and, that the body, how nicely soever constructed,

is

is still constructed in vain, when there is not a soul infused into it for the purpose of directing it's operations!

The Ouran Outang seen and described by Buffon, said to be the same with that of Edwards, which we have also delineated, was a female. Her air was melancholy, and her deportment grave; she approached even strangers with respect; would hand company to the door; sit at table; unfold a napkin; wipe her lips; use a fork or spoon; pour out her drink into a glass; join glasses when invited; and go through all the ceremonies of the tea-table. Though she would drink moderately of wine, she left it for milk, tea, or any sweet liquor. She was prodigiously fond of sugared comfits, which were too plentifully supplied by her numerous admirers; and, having a defluxion on the breast, so much sugar contributed to increase the malady, and to shorten her life. She remained at Paris but a single summer, and died in London.

Edwards informs us, that she was only about two feet and a half high, though some

voyagers

voyagers to Africa and India relate that the Ouran Outang is nearly six feet when standing or walking erect. Her shape, he observes, resembled most others of the monkey kind, and her hands and feet were the same. She differed, in being without a tail, and in not having any callous skin behind to sit on, as most monkies have: the head was rounder, and more human; the forehead high and rising; the nose flat; and the teeth resembling those of man. The hair from the neck inclined upwards round to the forehead; and the ears, which were naked, had much of the human make. The face, and naked parts of the paws, were of a swarthy flesh-colour: and the body and limbs were covered with a loose, shaggy, reddish brown hair, thick behind, and thin before; the hair from the hand to the elbow inclining towards the latter.

A male, examined by Edwards, was found to agree, as much as possible, in every respect. He believes them all to be natives of Africa, though there are voyagers to India who describe something like them.

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WHOOPING CRANE.

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# WHOOPING CRANE.

THE name of this finely formed bird is obviously derived from it's peculiarly sonorous voice. With the rest of the Crane kind, it must be classed, according to the Linnæan System of Zoology, as a species of the Ardea, or Heron; the characteristic of which is, a cristated head almost bare of feathers.

The length of the Whooping Crane, from the tip of the bill to the end of the claws, is five feet seven inches; the bone from the knee to the foot is eleven inches long; and the middlemost toe, without the claw, five inches.

The bill is six inches long, and toothed at the point; the nostrils are placed in the furrows on each side, at about a third of the length from the head; and the chaps, which are of a yellowish brown colour at their extremities, are dusky in the middle.

The

The top of the head is covered with a reddish skin; behind which, there is a triangular blackish brown spot, with one of the points backwards; a similar skin covers the cheeks. The sides of the head, the throat, neck, body and tail, are all white; the entire wings, too, except the nine exterior quills which are black, and the tenth which is black and white, are likewise white.

The thigh is bare five inches above the knee; the legs and feet are covered with black scales; and the outer and middle toes are united by a web as far as the first joint.

Buffon calls it the White Crane; but most other naturalists name it the Whooping Crane, or Ardea Americanus.

Catesby has described this bird, from a skin given him by an Indian; who told him, that these birds frequent, in great numbers, the lower parts of the rivers near the sea, in the beginning of spring, and return to the mountains in summer. This fact was afterwards confirmed

confirmed by a white; who informed him, that these birds are very noisy, and that they are seen in the savannahs at the mouth of the Altamaha, and other rivers, near St. Augustine's in Florida, and also in Carolina, but that they are never found farther north.

It is, however, observed by Buffon, that they advance into the higher latitudes; being found in Virginia, in Canada, and even in Hudson's Bay.

In Pennant's Arctic Zoology, there is the following passage relative to these birds.

"They make a remarkable whooping noise: this makes me imagine them to have been the birds whose clamours Capt. Philip Amidas, the first Englishman who ever set foot on North America, so graphically describes, on his landing on the isle of Wokokou, off the coast of North Carolina. "When," says he, "such a flock of Cranes, the most part White, arose under us with such a cry, redoubled by many echoes, as if an army

army of men had shouted together." This was in the month of July; which proves that, in those early days, this species bred in the then desart parts of the southern provinces, till driven away by population, as was the case with the Common Cranes in England, which abounded in our undrained fens, till cultivation forced them entirely to quit our kingdom."

This idea seems to be strengthened by a remark in Charlevoix's History of New France, that there were, in Canada, Cranes of two colours; some entirely white, others of a grey gridelin: they all, it is added, make excellent soup.

The first voyagers to America speak of the Cranes which they saw: Peter Martyr says that, in the savannahs of Cuba, the Spaniards met with flocks of Cranes twice as large as those of Europe.

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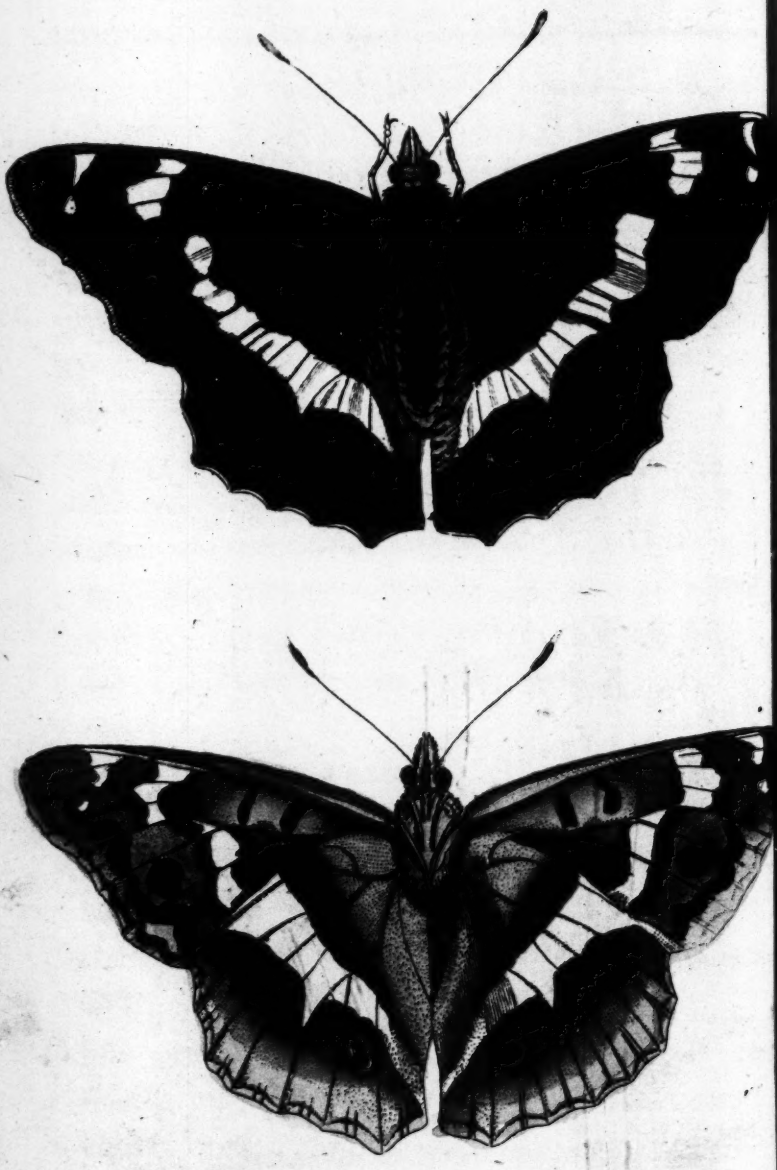

PURPLE EMPEROR.

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# PURPLE EMPEROR.

THIS beautiful butterfly, called in England the Purple Emperor, is the Iris, Nymphales, of Linnæus.

The striking difference between the upper and under sides, renders it necessary to present both, at a single view, on the same plate.

For our description, we cannot do better, than to adopt that of the late ingenious Mr. Moses Harris, long Secretary to the Aurelian Society, under the patronage of the famous Earl of Bute.

" The antennæ are black, having a little brown speck on the extremity of each. The head, thorax, and abdomen, are brown, and covered with fine hair of a dark but glossy ash-colour. The superior and inferior wings are very dark near the margins or fan-edges; but all the other parts are changeable, according

ing to the different lights in which this beautiful insect is viewed. Sometimes it appears of a sooty black; and, at others, the eye is suddenly dazzled with a resplendent glow of vivid purple: so that, by frequently turning the fly into different positions, the colours play and shift through all the gradations, from a sooty black to the most brilliant purple, in such a manner as undescribably to charm the eye with a delightful and amazing variety. The borders of the wings are ornamented with a row or line of misty orange spots; and, towards the abdominal corners of the inferior wings, there are two eye-like spots, one on each, which consist of a round black spot with a small speck of white in the middle, the black one being encircled with a gold-coloured ring. The superior wings have each a number of white spots; three of which, extending from the middle to the lower or slip-edge, seem to join another band which crosses the inferior wing, and reaches to that part which is nearest the anus or end of the abdomen.

"On the under-side, the eyes appear of a red brown, having a white streak under each.

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The palpi are white; and the thorax, as well as the eyes, are of a blueish or ash colour. The white spots are very similar to those on the upper-side; but the field, or ground colour, is of a reddish brown variegated with black and orange. The table-membrane is of a pale blossom-colour, with two spots of black. Towards the lower corner of the wing, there is a large orange-coloured spot, about three-eighths of an inch in diameter, the centre of which is a black ring, and within that there is another of purple. The inferior wings are of a dull pearl-colour near the body or thorax, as well as on the outer-edge; but near the white bar or band which crosses the middle, they are of a blood-red brown. The eye on the upper-side, near the abdominal corners, appears very faintly on this side.

"The expansion of the wings is three inches.

"The Caterpillar, which feeds on sallow, is of a green colour; and has two horns on it's head, like a snail or slug. It is in the Caterpillar

pillar state during the winter; changes into a Chrysalis, hanging by it's tail on the underside of a leaf, in the spring; and the Fly appears about the end of June.

"It flies very high; and sports round the tops of oak and ash trees, where it often settles on a leaf: but, the instant it perceives any small fly, or other insect, passing by, it pursues a little way; and then, going round the top of the tree, is sure to settle again on the same leaf.

"The female appears in every respect like the male, except that she has not the beautiful purple hue on the upper side."

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# RHINOCEROS.

NEXT to the elephant, the Rhinoceros may be considered as the most powerful quadruped. It forms a distinct genus of the order of Belluæ, in the class of Mammalia, according to the system of Linnæus. In this genus there are only two species: the Rhinoceros Unicornis, or One-Horned Rhinoceros; and the Rhinoceros Bicornis, or Rhinoceros with Two Horns, one above the other; the horns of both animals, as the name in the Greek language implies, arising from the nose. Both species were known to the ancients; and the Rhinoceros with a single horn, commonly described simply as the Rhinoceros, has been by some naturalists judged to be the unicorn of the sacred writings.

The height of this animal is from six to seven feet only; but it's length, from the tip of the nose to the insertion of the tail, frequently extends twelve, and the circumference of the body nearly equals the length; so that it's

it's magnitude, in fact, approaches that of the elephant, though to the eye it seems very considerably less, on account of the disproportionate shortness of it's legs.

In the more important gifts of nature, however, which relate to intelligence, it is left at a very humble distance from that sagacious animal, and appears to be elevated only in size from the meanest quadrupeds. It's skin is without sensibility; and, instead of a trunk, it has merely a moveable lip, to which all it's means of dexterity are confined. The chief sources of superiority which it possesses over other animals, are found in it's magnitude and strength; in the defensive impenetrability of it's hide; and in that offensive weapon on the nose, which forms it's most distinguished characteristic. This weapon is a solid horn of peculiar hardness; and, being situated far more advantageously than the horns of ruminating animals, which defend only the superior parts of the head and neck, it so protects the muzzle, the mouth, and the face, that even the tiger, who ventures to seize the trunk of the elephant,

elephant, dreads the risque of having it's bowels torn out by the horn of the Rhinoceros, and rather chuses to decline any attack.

The body and limbs are covered with a skin so thick and hard, as to be not only insensible to the stings of insects, but impenetrable by the claws of the lion or tiger, or even the spear or bullet of the hunter. This skin is sometimes of a dark or dirty brown; sometimes of a fine grey, approaching to black; and, sometimes, has the colour and appearance of an old elm-tree, partly spotted with black and grey, and partly doubled into deep furrows, which form a kind of scales. The skin, in general, is incapable of either extension or contraction; but there are large folds at the neck, the shoulders, and across the rump, to facilitate the motion of the head and limbs; and, between these folds, as well as under the belly, there appears a softer skin of a light flesh-colour.

The head is proportionably larger than that of the elephant, but the eyes are smaller, and generally

generally half closed. The upper lip, which is moveable, and projects over the under, can be extended six or seven inches; and, being terminated by a pointed appendage, the animal is not only enabled to collect herbage, or other food, and deliver it into the mouth, but also to seize any object with force, and feel with considerable address. There are two strong incisive teeth in each jaw, one at each angle. The under jaw is square before, and there are no other incisive teeth in the anterior part of the mouth, which is covered by the lips, but each side of the two jaws contains six grinders. The ears always stand erect, and resemble those of the hog, though they are proportionably smaller; and these, with the extremity of the tail, are the only parts on which there are any hairs or bristles.

Though the Rhinoceros was frequently exhibited in the savage spectacles of the Romans, from the days of Pompey, to those of Heliogabalus; though it had often been conveyed to Europe in more modern times; and though Bontius, Chardin, and Kolben, drew figures of

of it in India and in Africa; it was but imperfectly known, till Dr. Parsons published, in 1743, his history of the Rhinoceros, from an actual inspection of the living animal in London.

The Rhinoceros which that gentleman described was brought from Bengal, at the expence of nearly a thousand pounds. He was only about two years of age, and had a daily allowance of seven pounds of rice, with three of sugar, divided into three portions: he had also hay and grass, which last he seemed most to relish, and drank great quantities of water. He was of a gentle disposition, and permitted all parts of his body to be touched by visitors; never attempting injury to any one, except when hurt or angry: he would then become furious; and, in both cases, was only to be appeased by food. He sprung forward, on such occasions, and nimbly raised himself to a great height, pushing his head violently against the walls with amazing quickness, notwithstanding his heavy aspect and unwieldy mass. These movements, produced by rage or impatience,

tience, were often observed in the morning, before his rice and sugar was brought him; when, from the vivacity and promptitude of his motions, it appeared probable that he could, if unconfined, easily overtake any man who should offend him. He made many efforts to escape; but seldom ventured an attack on his keeper, to whose threats he was always submissive. His cry was peculiar, being a mixture between the grunting of a hog and the bellowing of a calf.

It was particularly remarked, that he listened with a deep and long continued attention to any noise; and that, though he were sleeping, eating, or in the act of obeying any other pressing demand of nature, he would instantly raise his head, and continue to listen till the noise ceased.

This young Rhinoceros was not larger than a heifer; but his body was very long, and very thick, and resembled that of a cow near the end of her gestation. The head was disproportionably

portionably large; and the horn, which was black, was only an inch high.

The horn of the Rhinoceros, however, is sometimes more than three feet long, and six inches diameter at the base; and it is commonly of a brown or olive colour, though there are instances of it's being grey, and even white. The elephant is said to be often found dead in the forests, pierced with the horn of the Rhinoceros. Combats between these two most formidable animals must, indeed, be dreadful. Emanuel, king of Portugal, at the beginning of the sixteenth century, willing to try their strength, actually opposed them to each other, and the elephant was defeated.

The Rhinoceros is a native both of Asia and Africa; it is, like the hog, fond of wallowing in the mire, and shews the greatest predilection for moist and marshy grounds, seldom quitting the banks of rivers.

The female produces but one at a time, and at considerable intervals. The young Rhinoceros

ceros does not, at first, exceed the size of a large dog; and it has no horn, though the rudiments are perceivable in the fœtus. At two years of age, the horn is about an inch long; and, at six, from nine to ten inches. Some of these horns being known to have nearly reached four feet, it should seem that they continue to grow during great part of the animal's life; and this, probably, is of considerable extent. The Rhinoceros of Dr. Parsons, in two years, had only attained to half it's full height; it may, therefore, be inferred, that this animal, like man, lives to the age of seventy or eighty.

The Rhinoceros feeds on the grossest herbs, Brushwood, broom, thorny shrubs, and thistles, it prefers to the soft pasture of the most luxuriant meadows. On a prickly shrub somewhat resembling juniper, which grows in vast quantities on the heathy lands and mountains of Africa, and has obtained the name of the Rhinoceros shrub, it chiefly delights to regale; and it's attachment to the stinking stapelia is little less ardent. It is also fond of the sugar-cane, and eats every description of grain.

Destitute

Destitute of any appetite for flesh, it molests not the smallest animals; and, having little reason to fear the largest, lives amicably with all. This pacific disposition renders doubtful all accounts of it's frequent combats with the elephant. Such contests, it should seem, must necessarily be very rare, since there is no offensive disposition on either side. Pliny is the first naturalist who has mentioned these conflicts; merely, perhaps, from having seen these animals compelled to fight in the barbarous spectacles of the Romans.

The method of taking the Rhinoceros, is chiefly by watching till it is found sleeping, when the hunters destroy it with fire-arms; and, if there happens to be a cub, it is seized and tamed. It is sometimes taken in pit-falls, covered with green branches, dug in those paths which this animal makes in it's way from the forest to a river.

The flesh of the Rhinoceros is much relished by the Indians, the negroes, and the Hottentots. It is said to be well-flavoured, but

but coarse and hard. The Indians carefully collect the blood, as a remedy for disorders in the breast. Wonderful medicinal virtues are also ascribed to the horn taken in powder; and, indeed, not only every part of the body, but even the urine and excrements, are considered, in the Indian Dispensatory, either as antidotes against poison, or infallible remedies for particular diseases.

Many, in short, are the fables, which this extraordinary animal has given rise to: and we ought not to omit, that some of the best naturalists assert, that the tongue is so hard and rough as actually to tear off the skin of any person whom it licks; while others, equally respectable, maintain that it is as soft and smooth as velvet.

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PAINTED CHINESE PHEASANT.

Published, February 1. 1798. by Harrison, Close & Co. No. 78. Fleet St.

# PAINTED CHINESE PHEASANT.

THIS beautiful bird, the Phasianus Pictus of Linnæus, is in England often vulgarly called the Gold Chinese Pheasant; but we entirely agree with Buffon, in his remark, that those authors who have applied to this bird, either the name of the Golden, or the Red Pheasant, by both which names it has frequently been described, would have had equal reason to have called it the Blue—and, he might have added, the Green—since it is enriched by the lustre of all these colours. This, however, seems to have partly escaped the notice even of the critical Buffon; for he, in some degree, commits the same fault, when he calls it—"Le Faisan Doré; ou, le Tricolor Huppé de la Chine."

The Painted Chinese Pheasant may be considered as a variety of the ordinary species, enriched with a garb which sparkles with the decorations of a more luxuriant climate. They are, probably, two branches of the same family, which have been long separated, but can still intermingle and breed together. Though a native of China, it is sufficiently hardy to

support

support the rigours of this climate; and, on account of it's extreme beauty, is much bred in our Pheasant walks.

It is smaller than the Common European Pheasant; the bill is of a light yellow colour; and the eyes are encircled with a bright yellow, but have none of that red skin which surrounds the eye of the Common Pheasant. The sides of the head are of a flesh-colour; and the crown is adorned with beautiful gold-coloured plumes, which the bird can either elevate or depress. The upper part of the neck is covered with orange-coloured feathers transversely barred with black; the bottom of the neck, and the beginning of the back, are of a fine dark green hue, reflecting a golden yellow, and these have also black transverse bars at their tips; and the remainder of the back, to the tail, is of a beautiful yellow, mixed in some places with a few bright scarlet feathers. The primaries of the wings are dusky or black; with yellowish brown spots on their webs; the middle quills are of a dull red hue, mixed or spotted with black; and some of the lesser quills are of an exceeding fine full blue: all

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the covert feathers are of a dull reddish colour; the first immediately covering the quills inclining somewhat to yellowish, with transverse lines of black. The under-side of the bird, from the bill to the tail, is a fine scarlet. The tail is prodigiously longer than that of the Common Pheasant, more mottled, and in general of brighter plumage. It is chiefly a mixture of black and reddish brown: the two middle feathers are black spotted with brown, and the side feathers are obliquely streaked with black and brown. A few long and narrow scarlet feathers, with yellow shafts, extending nearly half the length of the tail, project from the rump; the thighs are clay-coloured; and the legs, claws, nails, and spurs, are all yellow.

The female is smaller than the male, and her tail shorter; the colours of her plumage, too, are inferior even to those of the Common Pheasant: it is extraordinary, however, that they sometimes acquire, in time, the beauty of the male. It is a well ascertained fact, that one belonging to Lady Essex, changed, in the space of six years, her mean, dusky colour, into the rich lustre of the male, so as only to be

be distinguished by the appearance of the eyes and the length of the tail. This remarkable change of colour takes place in most females; and commences at four years old, when the male takes a dislike to them, and treats them harshly; the long, narrow feathers, which in the males lay over the tail, begin then to appear; and, as they grow older, they become more and more like the male. This, singular as it may seem, Buffon ingeniously observes, in a certain degree happens to all animals.

Edwards remarks, that he saw, at the Duke of Leeds's, a Common Pheasant, the plumage of which had in the same manner become like that of the male. He adds, that such changes of colours seldom take place, except among birds which live in the domestic state.

The eggs of the Painted Pheasant greatly resemble those of the Pintado. They are proportionably smaller than a hen's, and redder than those of the Common Pheasant.

Sir Hans Sloane kept a male of this species, which had been imported from China, nearly fifteen years.

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GREAT SPOTTED LIZARD.

Published February 1st 1806 by Harrison & Co. No. 26 Paternoster Row

# GREAT SPOTTED LIZARD,

## WITH A FORKED OR DOUBLE TAIL.

THAT most accurate and ingenious naturalist, Mr. George Edwards, who first figured and described this singular species of Lizard, for some time inclined to an opinion, that the circumstance of it's having two tails, though curious, might be merely accidental; but he was, at length, fully satisfied, on seeing other specimens with forked tails, that the peculiarity was perfectly natural.

From his description, which affords all that appears to be known of this curious animal, as it is scarcely mentioned by any other respectable naturalist, we learn that it is about ten inches long, and has a forked tongue like other lizards.

The top of the head is covered with broad scales of a whitish ash-colour; the sides of the head, the neck, the sides of the belly, the legs, and the feet, are greyish; the eyes are black;

the

the under chap is reddish; and the ears are open holes.

There are two black spots on each shoulder, and the middle of the back is marked with green throughout it's whole length: but this colour occupies most space at the rump, and terminates in a point between the shoulders.

The sides are marked with oval loose spots, as well as the exterior sides of the hinder legs; and the body, and part of the under-side of the tail, are chequered with fine blue squares, separated from each other by a darker blue or black.

The tail, as far as it is single, is blue on the upper side; but the parts of both tails, from the junction, to their respective ends, are of a brownish ash-colour, and each of the feet have five toes, with the same number of small nails or claws.

It seems to be of the same family with the Great Green and Spotted Lizard; which is a native of Jamaica, and subsists on insects.

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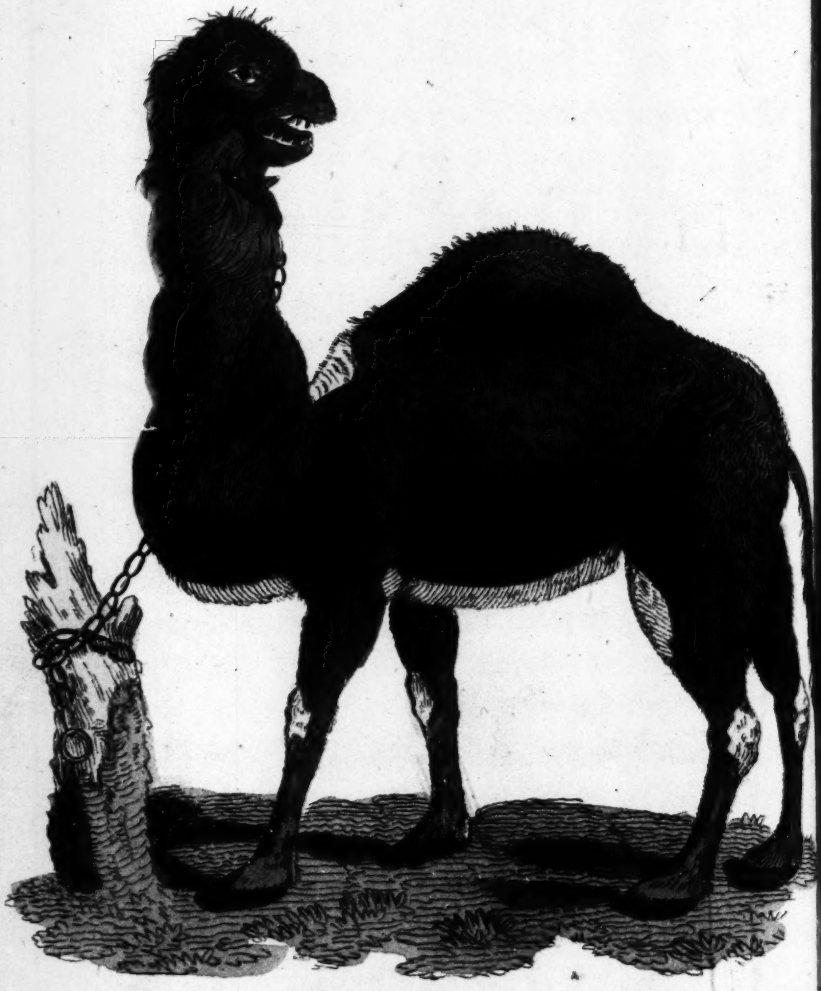

CAMEL.

Published March 1, 1798, by Harrison, Cluse & Co. No. 78, Fleet-Stree

# CAMEL.

IN the original Hebrew, from which our English name, Camel, has, through different gradations, been ultimately derived, the word Camal literally signifies, "he has made recompence:" meaning to express, that this animal well repays the care of bringing it up.

The Camel forms a distinct genus of animals, in the Linnæan system of zoology: the great characteristics of which are, that they have six cutting teeth in each of their lower jaws, but none in ther upper; and that their upper lips are divided, like those of hares, and their hoofs small and undeciduous.

There are several species of Camels; one of which, usually called the Dromedary, in England, has two protuberances on the back: but, by Linnæus, and most other great naturalists, the Dromedary is described to be one of the smaller species of Camels with a single protuberance;

protuberance; and the animal with two protuberances is uniformly named the Bactrian Camel. The two races, however, breed with each other; and the mixed progeny is said to prove the best, both for docility and labour, of all the several kinds.

Among the varieties of the Camel, the largest and strongest species is called the Turkoman; the Arabian is the hardiest; and that which is called the Dromedary, Maihary, and Raguahl, is the most swift. Those which have small protuberances, the most delicate shape, and are of an inferior size, are used solely for the purpose of riding, and never carry burdens; some of these are capable of travelling a hundred miles a day, for nine days together, over burning sands. The Camels of Africa are well adapted to that parched and unpropitious climate by the extreme hardiness of their nature; and are capable of performing journies from Numidia to Ethiopia, over sultry desarts, where no other animals could long survive.

In

In Arabia, where the Camel most abounds, it is held sacred, as an animal without the help of which the natives could neither subsist, traffic, nor travel. It's milk constitutes a part of their nourishment; they feed on it's flesh; they clothe themselves with it's hair; and, in case of invasion, it serves to accelerate their flight, being sometimes known to travel upwards of one hundred miles in a single day. By means of the Camel, the Arabs find perfect safety in their inhospitable desarts; since all the armies on earth might be lost in pursuit of a flying squadron of Arabs, mounted on Camels, and taking refuge in solitudes where nothing interposes to impede their flight, or to force them to face their invaders. Thus, where nature presents only objects of danger and sterility, the Arab finds protection, food, and liberty: in the midst of his solitudes, he lives independent and tranquil; and, instead of considering the wastes spread around him as a restraint on his happiness, he is taught by experience to regard them as the munitions of freedom.

The

The Camel has a small head; short ears; and a long neck, slender and bending. It's height to the top of the protuberance is about six feet six inches; the colour of the hair is commonly a reddish ash. It has a long tail, small hoofs, and flat feet divided above, but not quite through. On the legs it has six callosities; one on each knee, another on the inside of each fore-leg on the uppermost joint, and one on the inside of the hind-leg at the bottom of the thigh: there is also another, on the lower part of the animal's breast.

Buffon seems to consider the Camel as the most domesticated of all animals, and to have most marks of the tyranny of man imprinted on it's form. He is of opinion, that this creature is not now to be found in a state of nature; and that the protuberance on it's back, the callosities on it's breast and legs, and even the great reservoir for water, are all the effects of it's education, and badges of it's slavery. These deformities he supposes to be perpetuated by generation; so that, what at first

first was the effect of accident, has by degrees become natural. Certain it is, that the protuberance on the back of the Camel, which is composed of a substance not dissimilar to the udder of a cow, enlarges or diminishes in propotion as the animal is fed.

Nine out of ten male Camels are usually castrated; and though this operation may enfeeble them, it adds to their patience and docility. The female receives the male in a recumbent posture; she goes with young about a year; and, like the other large animals, produces but one at a time. The milk of the Camel is both abundant and nutritive; and mixed with water, constitutes a principal part of the beverage of the Arabians. These animals begin to procreate at about three years of age, and commonly live to forty or fifty. The genital part of the male resemble those of the bull, but are placed pointing backwards; so that the urine seems to be ejected in the same manner as that of the female: and this, as well as the dung, and indeed almost every part of the animal, is converted

to

to some beneficial purpose. Of the urine, sal armoniac is made; and, of the dung, litter for horses, and fire for culinary uses. This animal comprises within itself a variety of qualities: like the elephant, it is tractable and tame; like the horse, gives it's rider security; carries heavier burdens than the ox or the mule; and furnishes milk in as great abundance as the cow. The flesh of the young is said to be as delicate as veal; the skin is applied to many useful purposes; and the hair is more beautiful and valuable than the finest wool.

The Camel being a very docile animal, is easily instructed in the methods of taking up and supporting it's burden. It's legs are bent under it's belly a few days after it's birth; and, in this manner, it is loaded and taught to rise; the burden being every day increased, by insensible degrees, till the animal is capable of supporting a weight adequate to it's strength.

The same care is taken to render it patient of hunger and thirst. Other animals usually receive

receive their food at stated times, but the Camel is restrained for several days together: and these intervals of famine are increased in proportion as the creature seems capable of supporting them. By this mode of education, it lives several days without food or water; and, indeed, it's stomach is admirably fitted by nature for long abstinence; since, besides the four stomachs which all animals chewing the cud possess, the Camel has a fifth, which serves as a reservoir to contain a greater quantity of water than the animal has immediate occasion for, where it remains without corruption or adulteration from other aliments. When the Camel finds itself pressed with thirst, it here finds an easy resource; for, throwing up a quantity of this water, by a simple contraction of the muscles, into the other stomachs, it serves to macerate it's dry food. As it drinks but seldom, it takes a large quantity at a time; and travellers, when parched with thirst, are reported to have not unfrequently dispatched this useful animal for the sake of the fluid it's stomach was expected to contain.

In

In Turkey, Persia, Arabia, Barbary, and Egypt, the whole commerce of the natives is carried on by means of Camels; and no carriage is more speedy, nor can any be less expensive. Merchants and travellers unite themselves into a body, furnished with Camels, to secure themselves from the insults of those robbers who infest the countries through which they are to pass. This assemblage is called a caravan, in which the number of itinerants sometimes amounts to upwards of ten thousand, and that of Camels to a still greater number. Each of these animals is loaded according to it's strength; and, so sensible is the Camel of it's own ability, that it remains on it's belly when overloaded, and refuses to rise till it's load is proportioned to it's power. A large Camel is capable of carrying a thousand weight, and sometimes twelve hundred; while the Dromedary is sufficiently loaded with six or seven. During these trading journies, they travel but slowly; and their stages, which are generally regulated, amount to about thirty or thirty-five miles a day. Each evening, when they arrive at the place of their destination, which

which is usually some spot of verdure where water and shrubs abound, the Camels are permitted to feed at large; and, on such occasions, they eat as much in one hour, as is fully sufficient to support them the succeeding twenty-four. They prefer the coarsest weeds to the softest pastures; and the thistle, the nettle, the casia, and other prickly vegetables, are their favourite food. But all natural supplies of provisions being accidental, during these expeditions, their drivers take care to supply them with a kind of paste composition, which serves as a permanent nourishment. As these animals are accustomed to the same tracts, they are said to know their way with precision, and to pursue their journey when their guides are either absent or at a loss: and, when they come within a few miles of their usual baiting-place, they sagaciously scent it, increase their speed, and often trot with additional vivacity to the end of their stage.

Many efforts have been made to breed Camels in Spain and America, but they have not multiplied in either of these countries. They are,

are, indeed, sometimes introduced into them, and found prolific; but the care of keeping them is so great, and the accidents to which they are exposed from the variableness of the climate so numerous, that they never repay their necessary trouble and expence: in a few years, they are observed to degenerate; their strength and patience forsake them; and, instead of constituting the riches, they become the burden of their owners.

It is not incurious to observe, how nearly alike, in most ancient and modern languages, is the name of the Camel. In Hebrew, it is Gamal; in the Chaldean, Gamala; in ancient Arabic, Gemal; in modern Arabic, Gimel; in Greek, Kamelos; in Latin, Camelus; in Italian, and in Spanish, Camelo; in German, Koemel; and, in French, Chameau.

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ASH-COLOURED AND RED PARROT.

Published March 1. 1798. by Harrison & Cluse. No. N°. 78. Fleet Str

# ASH-COLOURED AND RED PARROT.

THIS bird, the Psittacus Erithacus of Linnæus, is nearly the size of a common pigeon. The bill, which is of a blackish colour, is hooked and angulated; and the nostrils are situated pretty near each other, in a whitish skin which covers part of the bill above, the sides of the head being covered with a similar bare skin which joins to the bill forwards. The eyes are small, and the irides yellow.

The plumage of the entire bird, except the tail, is a mixture of ash-colour and red; but the shades are darker on the greater feathers of the wing than in other parts. The tail is wholly red, the feathers being short, and of equal lengths; and the legs and feet are covered with a rough, scaly skin, of a dark ash-colour.

The Common Ash-Coloured Parrot exactly resembles this bird; except that, in the former, the body is compleatly ash-coloured, lighter on the

the rump and belly, and darker on the great feathers of the wings.

The Ash-Coloured and Red Parrot is found in many parts of Africa; and, particularly, in Guinea. It is frequently brought to Europe, and is by no means uncommon in England.

Buffon observes, that the Grey Parrot, as the Cinereous Guinea Parrot with a crimson tail, is commonly denominated in England, has been often observed, after moulting, to become marbled with white and rose-colour; occasioned, as he imagines, either by some distemper, or by advanced age. For this reason, he is of opinion, that what Brisson has described as varieties, under the names of the Red-Winged Guinea Parrot, and the Red variegated Guinea Parrot, are owing to accidental changes of plumage. In that figured by Edwards, called the Ash-Coloured and Red Parrot, Buffon adds, that the red feathers appear mingled at random with the grey, as if the bird had been decked out with borrowed plumage.

This

This appearance, whatever idea it might convey to the mind of Buffon, was unquestionably an exact delineation of nature, taken by Edwards, with his usual fidelity, and which we have as faithfully copied from that excellent naturalist.

That this, and other Cinereous Parrots variegated with red, are all originally of the common Grey Parrot family, we incline to believe; their forms and habits are the same, and there seems no other difference than the diversity of feathers.

Many have been the disputes, whether Grey or Green Parrots possess, in general, the greatest powers of speech: and numberless stories are gravely related of each, by their respective admirers, which imply not only the faculty of speech, but the presence of intellect; not only imitation and memory, but thought and mind. These absurdities we are not at all disposed to promulge; nor can we venture to decide, from our own knowledge, which plumage has the pre-eminence. Like arguments respecting

specting the superiority of intellect which resides with the different complexions in the highest order of animated nature, more of the boasted superiority in either, we conceive, is ascribable to the influence of education, and accidental circumstances, than to climate or colour.

What Dr. Goldsmith relates, may serve to illustrate our remark—"In going through the towns of France, some time since, I could not help observing how much plainer their Parrots spoke than ours; and how very distinctly I understood their Parrots speak French, when I could not understand our own, though they spoke my native language. I was at first for ascribing it to the different qualities of the two languages, and was for entering into an elaborate discussion on the vowels and consonants; but a friend that was with me solved the difficulty at once, by assuring me that the French women scarcely do any thing else the whole day, than sit and instruct their feathered pupils; and that the birds were thus distinct in their lessons, in consequence of continual schooling."

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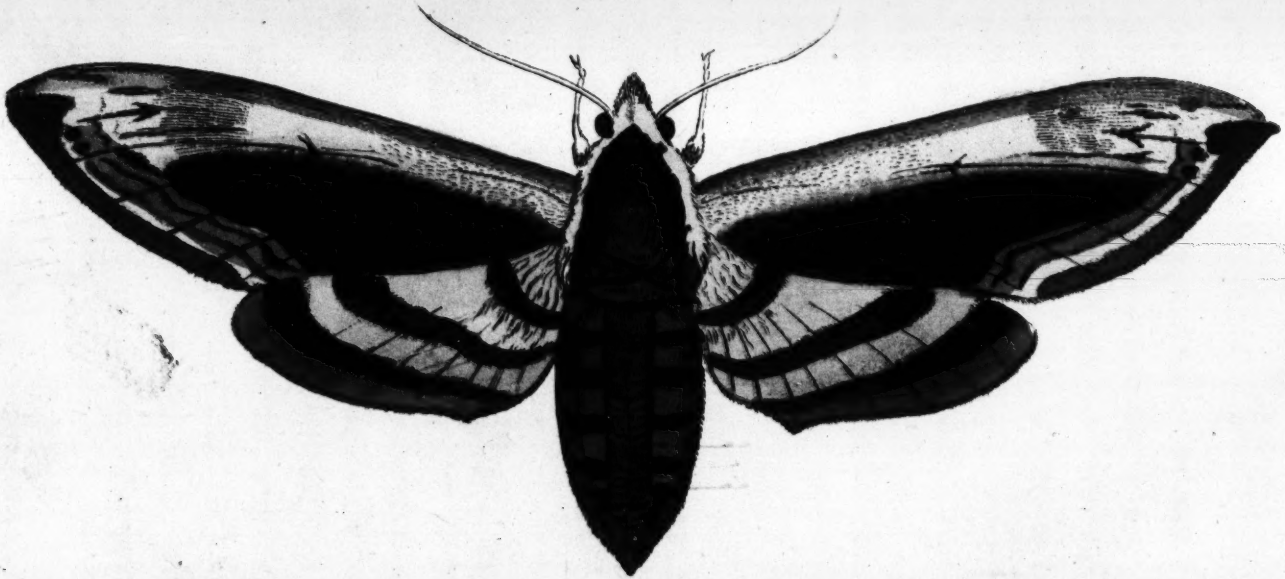

PRIVET MOTH.

Published March 1.1793 by Harrison & Co. Paternoster Row & Phil. Wm. Fleet Street.

# PRIVET MOTH.

THE name of this grand and beautiful Moth is derived from the favourite food of it's caterpillar, which is usually found feeding on Privet, though it may sometimes be met with on the lilach.

The Caterpillar, when full fed, is about four inches long, and of a fine green colour. The head is bordered with black down each side; there are seven oblique stripes of purple and white on each side of the body; and a black and glossy, sharp-pointed, horn-like appendage, is fixed at the tail.

It goes into the ground about the middle of August, where it changes into a large brown Chrysalis; and, about the sixth or seventh of June, this fine grand and beautiful Moth makes it's appearance, exactly as we have figured it, measuring full five inches from tip to tip of the expanded wings.

The

The Privet Moth is one of the Sphinx kind. It flies in the evening after dark, but is rarely taken in the Moth state.

The embrio Caterpillars are easily found in Privet hedges, by searching underneath for them. They are black, and about the size of a pea; but in form very much resembling pieces cut from a small rope.

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TUFTED APE.

Published. April 2. 1798 by Harrison, Cluse & Co. N.° 78. Fleet Street.

# TUFTED APE.

THIS singular species of the Ape, which derives it's name from the long upright tuft of hair rising on the top of the head, and the small one depending beneath the chin, was first figured by Edwards, but has been unnoticed by most other naturalists.

The head of this animal is about fourteen inches long; the face being blueish and naked, and the nose of a deep red. The eyebrows are black, and the ears are formed like those organs in mankind. It has two long tusks in the upper jaw; and the fore-feet resemble human hands, with the nails of the fingers flat. The fore-part of the body, and inside of the legs and arms, are quite naked, and of a tawny flesh colour: the other parts, except the buttocks, which are red and bare, are covered with mottled brown and olive-coloured hair, that on the back being dusky.

The length of the whole animal is not more

more than about four feet. It has a most savage and disgusting appearance, and is peculiarly fierce and salacious.

Though it usually goes on all-fours, it will sit on it's rump, and support itself with a stick. In this attitude, it holds a cup, or even a quart mug, in it's hand, out of which it drinks with facility: and such is the strength of this animal, that it was frequently seen, when exhibited in London, so lately as the year 1796, to hold itself down in a chair by means of it's stick, with such force, that two strong men, one at each end, were unable to lift up the animal.

Like the rest of the Ape tribe, it chiefly subsists on fruits; and, apparently, has not any carnivorous appetites.

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GREATER BIRD OF PARADISE.

Published April 2. 1798 by Harrison, Cawthorn & Co. N. 78. Fleet Street

# GREATER BIRD OF PARADISE.

THIS very curious and beautiful bird, the Paradisea Apoda of Linnæus, is about the size of a blackbird. The wings, when closed, measure seven inches; the long shafts, springing from the rump, twenty-seven inches; and the longest of the soft loose feathers depending in two separate masses of indescribable delicacy and beauty from beneath the wings, is twenty-one inches. The bill is an inch and three quarters long; and, from it's tip, to the extremities of the common or shorter feathers of the tail, is about twelve inches. The bill has a slight convexity towards the point, and is of a dirty yellowish green colour; the fore-part of the head is covered with greenish black feathers of a velvet gloss, which entirely surround the bill; the throat is clothed with green feathers of the same velvet fabric, shining with a golden gloss; and fine yellow feathers extend circularly from the upper part of the head to the sides of the neck. The rest of the plumage, though delicate, is of the common fabric. On the back, the

breast,

breast, and the wings, it is of a beautiful brown, inclining to cinnamon colour. The two shafts, or filaments, springing from the rump, though yellowish at their rise, are a dark brown colour approaching to black.

This species is chiefly remarkable for the plats of feathers under the wings on each side, which extend themselves prodigiously beyond the common feathers of the tail. These feathers are of an inconceivably fine structure, and exceedingly light; and the webs are so very open, that they may be seen through like gauze. They are of a light yellow colour, which softens by degrees, towards their extremities, till it sinks into white.

The legs and feet, which are shaped like those of the pye kind, and armed with claws of some strength, are of a dark brown colour.

There is a fine specimen of this bird in the Leverian Museum.

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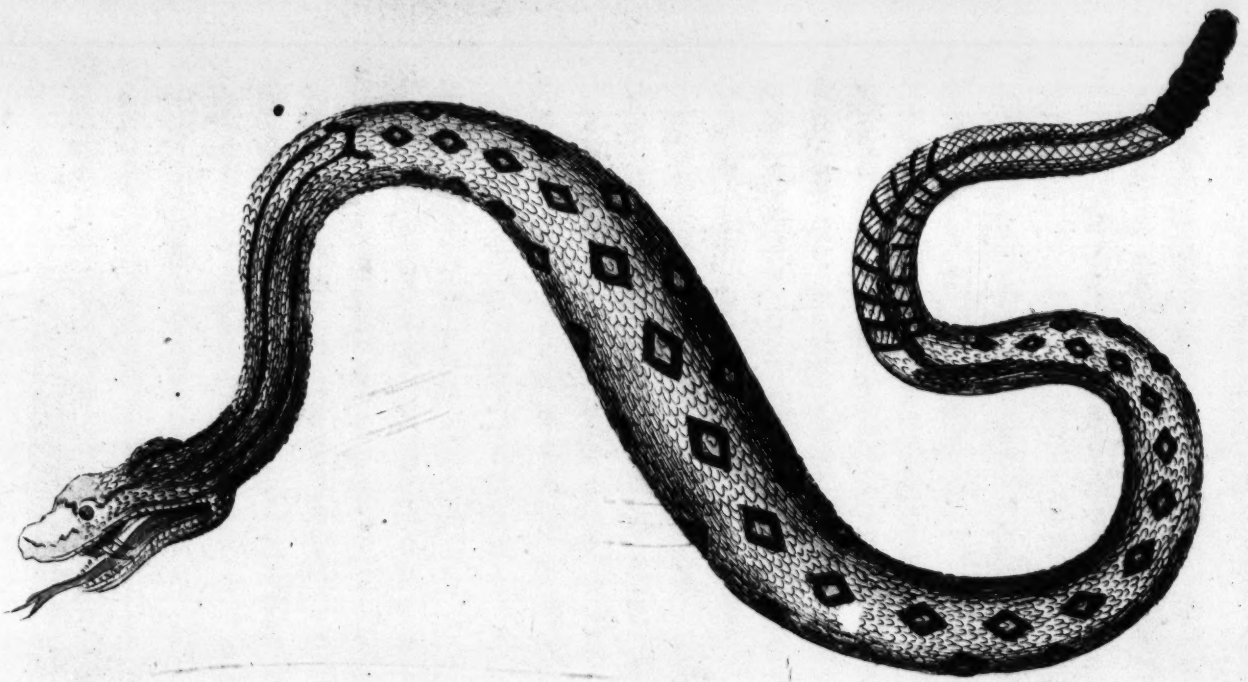

RATTLE SNAKE.

Published April 1st 1804 by Harrison Platt & Co. 118 & 128 Fleet Street.

# RATTLE SNAKE.

THIS very formidable and poisonous reptile, the Caudisonant of Linnæus, is a native of America, being wholly unknown in every other part of the world. It is the largest serpent that exists in North America; and was formerly, at the first settling of Georgia, frequently seen from seven to twelve feet long, and sometimes eight inches in diameter. Few so tremendous, however, have for many years been met with; the usual size being from four to six feet in length, and about six inches in circumference.

The Rattle Snake is considered as a superior species of viper: like that reptile, it has a large head, and a small neck; it's colours are dusky, and it's fangs inflict the most terrible wounds. It differs, however, in having a large scale pendulous over each eye: and the eye, which is small, is also furnished with a nictitating membrane, that preserves it from dust. The scales are rather hard, and usually

of

of an orange tawny and blackish colour on the back, and of an ash-colour inclining to lead on the belly. There are, however, many varieties: some spotted, or marked extremely dark, so as to seem almost black; and others speckled and clouded so beautifully, as to be denominated, by the Indians, Yellow Snakes. The male may be easily distinguished from the female, by a black velvet spot on the head, and by the head itself being longer and more slender. But that which most particularly distinguishes this from all other animals, and to which it owes it's name, is the Rattle; an appendage at the end of it's tail, which makes such a loud noise, while the creature is in motion, that it's approach may be readily known, and consequently the danger avoided. This Rattle, when separated from the tail, somewhat resembles the curb-chain of a bridle; and is composed of several thin, hard, hollow bones, linked loosely together, and rattling on the slightest motion. Some naturalists are of opinion, that the Snake acquires an additional bone every year; and that, therefore, the creature's age may be precisely ascertained: certain it is, that young Snakes, of a year or two old,

 are

are destitute of Rattles; while many old ones have been killed, which had eleven or thirteen joints each. These Rattles are shaken with prodigious noise and rapidity, when the animal is disturbed: and, then, most creatures tremble at the sound, and instantly provide for their safety in flight; the vulture and the peccary, however, rejoice at these signals, hasten to their favourite prey, and seize the Snake with the utmost alacrity.

Widely different is the case, with regard to almost every other class of animated being. The certain death which ensues from the bite of this terrific reptile, creates a kind of solitude wherever it is heard. It moves along, however, with the most majestic pace, neither offering to injure the larger animals, nor appearing apprehensive of insult. Unprovoked, it never annoys any creature, except it's natural prey: but, if pursued or molested, it instantly throws itself into a spiral coil; the tail, by it's rapidity of motion, appears like a vapour, making a quick tremulous sound; the whole body swells with rage, continually rising and falling like the action of a pair of bellows;

bellows; the beautiful parti-coloured skin becomes speckled and rough by dilatation; the head and neck appear flattened; the cheeks swell; the lips, being constricted, discover it's deadly fangs; the eyes glow like burning coals; and the brandishing forked tongue, of the colour of the hottest flame, continually menaces death and destruction! Yet the creature never strikes, till certain of reaching it's mark: then, erecting itself on it's tail, the wound is inflicted in an instant; when it draws back, and meditates a second bite. After this, if we may credit some authors, it remains torpid and inactive, without even attempting to escape.

The wound, though at first seemingly trivial, is considerably more painful than the sting of a bee; and this pain, far from abating, becomes every moment more excruciating and dangerous: the affected part swells; the venom reaches the head, which soon assumes a monstrous appearance; the eyes appear red and fiery; and the heart beats quick, with frequent interruptions. In a short time, the pain grows insupportable, and some expire under it in five or six hours; while others, with stronger constitutions

stitutions, survive the agony somewhat longer, only to yield to a universal mortification, which speedily contaminates the whole frame.

A Virginian gentleman, walking in his fields, accidentally trod on a Rattle Snake, which had been lurking in a stony situation; when, enraged by the pressure, it reared up it's head, bit his hand, and shook it's Rattles. The gentleman immediately perceived his dreadful situation: but, resolved not to die unrevenged, he killed the Snake; and, carrying it home in his hand, threw it on the ground before his family, crying out—"I am a dead man! here is my murderer!" His arm, in which the swelling had already commenced, was instantly tied up near the shoulder; and, the wound being anointed with oil, every precaution was used to check or extract the infection. Having a remarkably sound constitution, he recovered; but not without experiencing the most violent and dreadful symptoms for several weeks successively. The arm, below the ligature, appeared of various colours; and he felt a writhing among the muscles, which represented, to his terrified imagination, the very

motions

motions of the animal that inflicted the wound. This was followed by a fever, with the loss of his hair, giddiness, drought, debility, and nervous faintings; till, at length, by slow degrees, a very strong habit, co-operating with medicinal applications, compleatly expelled the latent malignity.

In the History of Peru, an account is given of a young woman, who was wounded by a Rattle Snake, and died on the spot, before any relief could be obtained; and, when the corpse came to be taken up, the flesh separated from the bones, so speedily did the violence of the poison dissolve the structure of the body.

Several remedies have been tried to alleviate this calamity: a decoction of the Virginian Snake-root is considered as the most efficacious; and, at the same time, the head of the reptile, bruised and laid on the part affected, is judged to assist the cure. In general, however, it is found to be fatal; and the Indians, sensible of this, frequently dip their arrows in the poison lodged under the fangs of this venomous creature, when their savage disposition

tion prompts them to execute any signal revenge on their enemies.

Thus far the history of this animal seems unanimously confirmed by naturalists: but, with respect to it's fascinating power, and the slowness or celerity of it's motions, there have been various opinions. Some describe it's motion as the swiftest imaginable, asserting that it's Indian appellation, Ecacoalt, or the Wind Serpent, is to be understood of it's wonderful agility; others affirm, that it is the slowest and most sluggish of all serpents, and seldom moves from it's place; and a third class insist that, though it moves slowly on level ground, it travels among rocks at a prodigious rate. Of occasional rapid motion, it certainly is capable; though, reasoning from analogy, it's general slowness seems probable, as the viper, which it so nearly resembles, is remarkable among serpents for it's sluggish motions.

Bartram, who had frequent opportunities of seeing Rattle Snakes, in his travels through the Southern States of America, where they

are

are the biggest and most numerous, and supposed to be the most venomous and vindictive, after observing that they not only kill the largest animals in a few minutes, but turn the whole body into corruption, immediately adds, "yet such is the nature of this dreadful reptile, that it cannot run or creep faster than a man or child can walk."

Most authors have ascribed to the Rattle Snake, the power of charming it's prey into it's mouth; which some, however, flatly deny. The inhabitants of America, are said to have opportunities of observing this fascination every day: this Snake being often seen basking at the foot of some tree where birds and squirrels take up their residence; there, coiled on it's tail, with it's jaws extended, and it's eyes gleaming like fire, it levels it's dreadful glance at one of the animals above. The little victim too plainly perceives the meditated mischief, and hops from branch to branch with a timorous, plaintive sound, wishing to avoid the enemy, yet incapable of breaking through the charm: thus it continues, for some time, it's feeble efforts and complaints, but is still

seen

seen approaching lower and lower towards the bottom branches of the tree; till, at last, as if vanquished by the potency of it's fears, it jumps from the tree directly into the throat of it's dreaded destroyer.

In order to ascertain the authenticity of this wonderful quality, a mouse was put into a large iron cage where a Rattle Snake was kept, and the effect carefully observed: the mouse remained motionless at one end of the cage; while the Snake continued fixed at the other, with it's eyes glaring full on the timid animal, and it's jaws opened to the widest extent. The mouse, for some little time, appeared eager to escape: but every effort served only to increase it's terrors, and to draw it still nearer the enemy; till, after several ineffectual attempts to destroy the fascination, it was observed to run directly into the mouth of the Snake.

To the above relations, the incredulous oppose their apparent improbability; and assert, that such a power ascribed to serpents is only a relic

a relic of a vulgar error, by which it was supposed that these creatures themselves could be charmed, at the same time that they possessed the power of charming: they aver, that animals are so far from running down the throat of the Rattle Snake when in captivity, that the reptile will not then eat any thing, but actually dies for want of subsistence. This scepticism, perhaps, is only an effect of that modern philosophy, which doubts of every thing that cannot be solved by human reason; and, where that sort of evidence is not procurable, denies the fact, to discharge the argument. That there is a particular effluvia of the eye in man, as well as in irrational animals, which is capable of a kind of fascination, has been admitted by many who abjure the marvellous, and are by no means the dupes of a blind credulity: may not the Rattle Snake, then, possess a quality, in a superior degree, proportioned to it's malignity, which is at least sensibly felt in other creatures?

Dr. Owen gives an account of a singular method of destroying the Rattle Snake, by holding

holding the bruised leaves of Virginian dittany, or wild pennyroyal, fastened at the end of a cloven stick, to the nose of the animal: who, by turning and wriggling, labours hard to avoid the scent, but is killed by it in less than half an hour. This is said to have been seen practised in 1657, and in the month of July, at which season of the year the animal is reputed to be in the greatest vigour and most venomous. It is added, that the Rattle Snake never frequents those spots where this wild pennyroyal grows; and the doctor remarks, that the strong smell of the broad leaves of the Virginian dittany, which are very hot and biting on the tongue, may probably stop the passages of respiration, in these animals, or ferment with their blood, so as to suffocate them.

Bartram offers a much easier expedient, which he has himself repeatedly tried. "A stick," he says, "no bigger than a man's thumb, is sufficient to kill the largest Rattle Snake at one stroke, either on the head or across the back." Nor, as he informs us, can it

it escape by running off, or does it ever attempt to do so when attacked.

This traveller observes, that some nations of the Indians never kill the Rattle Snake, or any other serpent; alledging, as their reason, that if they did so, the spirit of the Snake would excite or influence it's living kindred or relations to revenge the injury or violence done to it when alive.

The flesh of the Rattle Snake is said to be much relished, even by Europeans.

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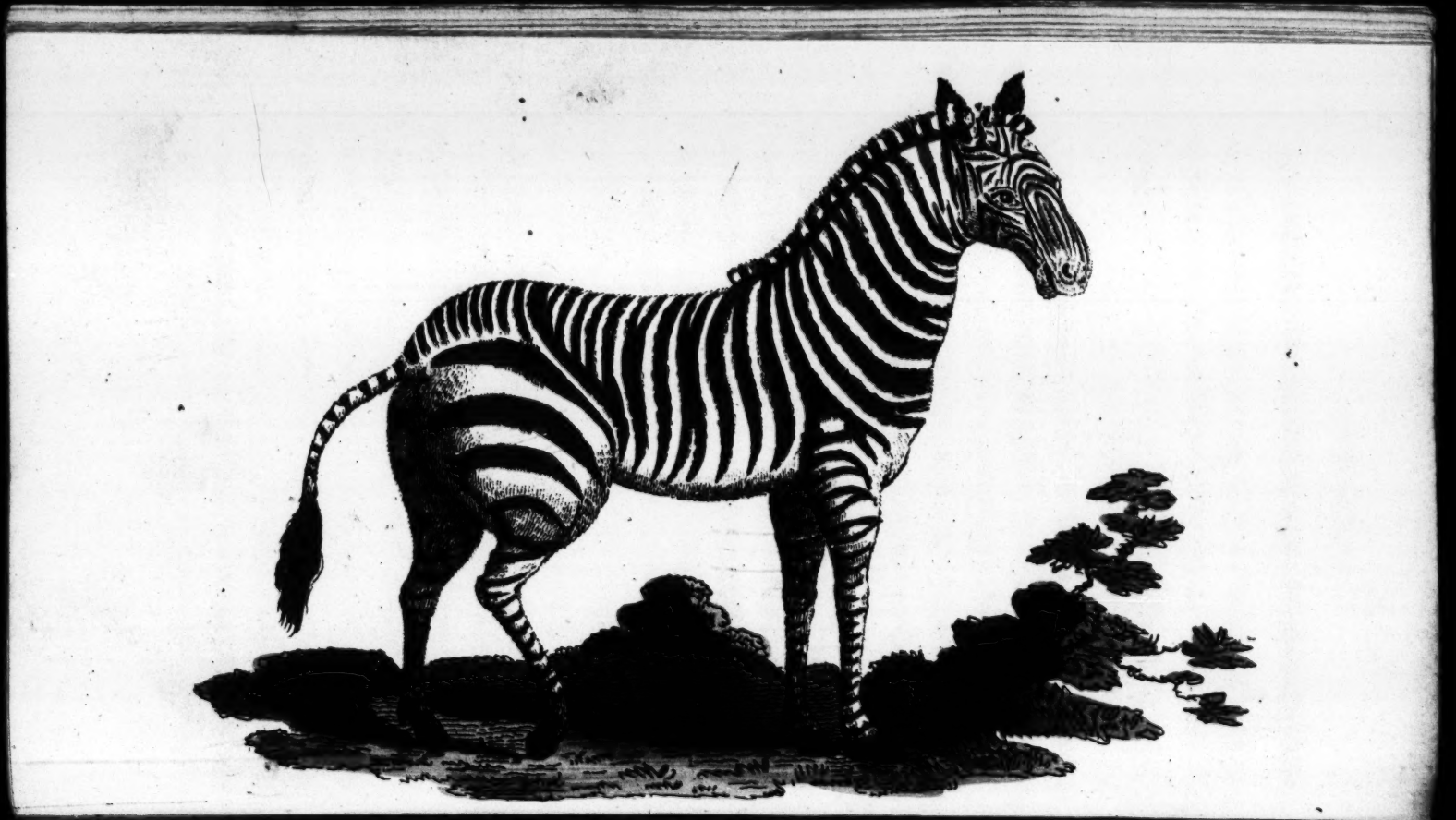

# ZEBRA.

THIS beautiful animal is denominated by Linnæus, "Equus Zebra, Fasciis Fuscis Versicolor;" from which it seems apparent, that he considered it as of the horse kind: Brisson, on the contrary, calls it "le Zebre, ou l'Ane Rayé;" as being, in his opinion, of nearer affinity to the Ass. In Kolben's Cape of Good Hope, it is mentioned simply as the Wild Ass; while Klein decidedly names it, "Equus Ferus genere suo," the Wild Horse of it's own kind.

Zebra, or some word of similar sound, seems to be it's general appellation. In Congo, it is called Zebra, Zevera, and Sebra; and, according to Pyrard, Esvre in Angola.

Pennant considers the Zebra as the most elegant of all quadrupeds; and Buffon, after expressing the same opinion, says, that it has the figure and gracefulness of the horse, united with the nimbleness of the stag. It is generally smaller than the horse, and larger than

the

the ass; and, though often compared to these two animals, under the names of the wild horse, and striped ass, it is not a copy of either, but should rather be considered as their model, if in nature every species were not alike original, and had not an equal right to claim the honours of creation.

The Zebra, therefore, is neither a horse nor an ass; for, though often attempted, they were never known to intermix and produce together: nor is it the animal mentioned by the ancients under the name onager; the onagri, or wild ass species, being still numerous, and differing from the domestic asses by those qualities only which result from freedom and independence. But neither the onager, nor the fine asses of Arabia, can be regarded as the origin of the Zebra species, though they resemble it in figure and swiftness. None of them exhibit that variety of colouring by which the Zebra is so eminently distinguished. This beautiful species is singular, and very remote from all other kinds. It also belongs to a different climate from that of the onager, being only found in the eastern and southern regions of Africa, from

from Ethiopia to the Cape of Good Hope, and from thence as far as Congo. It exists not in Europe, Asia, or America, nor in any of the northern parts of Africa. Those mentioned by some voyagers to have been seen in Brasil, had been transported thither from Africa; others, noticed in Persia and in Turkey, had been carried from Ethiopia; and almost all which have ever been brought to Europe, came from the Cape of Good Hope. This point of Africa is their native climate, where they feed in herds, and are very numerous. Such, however, is their vigilance, that they never suffer any thing to approach them; and their extreme celerity soon renders vain every hope of pursuit.

This animal, in it's shape as well as size, seems to be a nearer resemblance of the mule than either of the horse or the ass. It's ears are shorter than those of the latter, and longer than the former. It's head is large, it's back straight, and it's tail tufted at the end, like the ass; and, like the horse, it's skin is smooth and close, and it's posteriors are round and fleshy.

The

The Zebra is remarkable for the lustrous smoothness of it's skin; and, in the delicate regularity of it's particoloured bands or stripes, it has no parallel. Though the colours of these stripes somewhat vary, from a chesnut brown to black, and from white to a pale buff or yellow; they are, generally, in the male white and brown, and in the female white and black. These beautiful stripes are alternately disposed, like belts or ribbands, with such regularity and exact proportion, that nature has the semblance of having employed the rule and the compasses. They are straight, narrow, parallel, and as nicely separated as those of a striped silk or stuff. The colours, in fact, are never blended or confused; but are uniformly preserved round the body or limb, without the smallest difference of hue. The head, body, thighs, legs, and even the tail and ears, are thus beautifully streaked; so that, at a little distance, persons unacquainted with the animal, might suppose that it was dressed out by art, and not thus admirably attired by nature.

Such is the exquisite beauty of this animal, and so excellently are all it's parts adapted for utility

utility as well as ornament, that it might seem peculiarly calculated by nature to gratify the pride and pleasure of man. But it appears, to have uniformly evinced a lofty disdain of servitude; and neither force, stratagem, nor mildness, have been able materially to abate the just sense it seems always to entertain of the conscious dignity of it's native independence. The persevering tyranny of man, however, which has long since subjugated the horse and the ass—both, probably, when first taken from the forest, equally ferocious, obstinate and unmanageable—will, in time, it can hardly be doubted, add this animal to the number of those which are already objects of his domestic despotism.

That this has not hitherto been effected, may in some measure be accounted for. In the countries where these animals most abound, the human inhabitants appear to be but a few degrees elevated above the quadruped. The natives of Angola and Caffraria have no other idea of advantage to be derived from animals, than as they are proper for food. Neither the fine stature of the Arabian courser, nor the beautiful

beautiful markings of the Zebra, affording allurements to a race of people, who consider only the quantity of an animal's flesh, without regarding it's conformation. The delicacy of the Zebra's shape, or the painted elegance of it's form, are as little esteemed by them, as by the lion that in like manner makes it his prey. We may hence reasonably conclude, that the Zebra has continued wild, because it is the native of a country where no suitable and successive efforts have been used to reclaim it. The pursuits hitherto directed against it, have been more against it's life than it's liberty: thus the animal has been taught to consider man as it's destroyer, not it's protector; and we cannot wonder that it should refuse to yield obedience where it has so seldom experienced mercy.

Animals, in general, seem to possess a kind of instinctive knowledge of their enemies, and take every precaution to avoid them. The deer flies from the lion, and the mouse from the paws of the cat. The instinct which warns these and other animals of their danger, may have prevented the Zebra, with many others,

from

from submitting to those from whom, while they had every thing to dread, they had nothing to hope.

Should the Cape of Good Hope, which we have recently taken from the Dutch, continue in our possession, the period of this animal's being tamed, and rendered serviceable, may probably not be very distant: and if we could, by proper care, improve the breed, as we have done in many other instances, we might at length acquire a new race of domestic animals, as large as the horse, and far more strong, fleet, and beautiful.

The male Zebra, however, in the Royal Menagerie at Paris, from which Buffon took his description, could never be entirely conquered, notwithstanding all the assiduous efforts made to reclaim him. A groom, indeed, was sometimes able to mount him, with the assistance of two other men to hold the reins: but such was his extreme fierceness, that the rider never considered himself safe on his back; and even the approach of any one always seemed to render the animal more resolutely

lutely bent on exhibiting a determined and most invincible resistance. Buffon adds, that the Zebra's mouth is extremely hard; his ears are so sensible, that he flings whenever they are touched; and, like a vicious horse, he is as restless and as stubborn as a mule. But the wild horse, and the onager, are perhaps equally untractable; and he thinks it extremely probable that, if the Zebra were early accustomed to obedience, and to a domestic state, it would become equally gentle with the ass and the horse, and might supply the place of both.

The Zebra, too, presented to our queen, soon after her arrival in England, and which was for some years kept in her majesty's stables near Buckingham House, though taken young, and treated with the utmost indulgence, was extremely vicious and untractable.

In agreement with these, is the account of several Zebras being sent to Brasil, not one of which could be tamed. They would only permit a single person to approach them; and, though tied up short, and secured with all imaginable care, one of the animals contrived

to

to get loose, and actually bit the groom to death.

But, if we may credit Dapper, the Portuguese so far succeeded, as to tame four Zebras, which were sent from Africa to Lisbon, and actually drew the king's coach; and two are said, by Buffon, to have been received in Holland, for the purpose of drawing that of the stadtholder. Merolla asserts, that the Zebra, when tamed, which he speaks of as being very common, is not less estimable for swiftness than beauty.

Though the Zebra is a native of so hot a climate, it seems capable of existing in any country not intensely cold; and one of these animals, which was a few years since exhibited in England, would eat bread, meat, and tobacco, as well as grass or hay.

The female is supposed to bring forth her young annually, like the horse and the ass kind, but of this there is no certain testimony. The voice of the Zebra, however, is unlike either

either of those animals, rather resembling the confused barking of a mastiff dog.

The Zebra is considered as a valuable present to the oriental princes; and a governor of Batavia, who sent one which he had received from Africa, to the Emperor of Japan, had an equivalent returned to the value of sixty thousand crowns. Teller also informs us, that the Great Mogul gave two thousand ducats for a Zebra; and it is not uncommon for the African ambassadors to take with them some of these beautiful creatures as introductory presents to the Grand Seignior.

Buffon inclines to the opinion, that the fertile mule of Tartary, called the czigithai, is an animal of the same species with the Zebra. There seems to be no difference between them but in colour; and the variations of colour alone, in hair or feathers, are known to be extremely slight distinctions, frequently depending on the nature of the climate. The czigithai is found in the southern parts of Siberia, in Thibet, and in Tartary. Gerbillon remarks, that

that the czigithai is common in the country of the Monjoux and Kakas; that it differs from the domestic mule; and that it cannot be trained to bear burdens. Muller and Gmelin assure us, that these animals are numerous in the country of the Tongusians, where they are hunted like other game; that, in Siberia, towards Borsja, they are very plentiful in dry seasons; and that they resemble a bright bay horse, in figure, size, and colour, except that they have very long ears, and a tail like that of a cow.

If those travellers who examined the czigithai, had at the same time compared it with the Zebra, they might probably have discovered a great number of relative appearances. In the Petersburgh cabinet, there are stuffed skins of both animals; and, from these, it seems manifest that, though they differ in colour, they belong to the same or a very neighbouring species. Time alone can remove or confirm these conjectures: but, as all the other animals of Africa are likewise found in Asia, if the Zebra and czigithai should not be of the same species,

cies, the Zebra would form a single exception to this general rule; especially, as the czigithai, if not the same species with the Zebra, may possibly be the Asiatic onager, or wild ass. Perhaps, concludes Buffon, the horse, the ass, the Zebra, and the czigithai, belong to the same genus, and constitute three or four branches of one family, the two first of which have long been reduced to a domestic state. We may, therefore, he adds, presume to hope, that the two last will likewise be tamed, and prove a useful acquisition to mankind.

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BRASILIAN BITTERN.

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# BRASILIAN BITTERN.

THIS species of Bittern, the Ardea Brasiliensis of Linnæus, is by Buffon called the Onoré of the Woods. Marcgrave ranges it, under the general name Soco, with the Herons: but, as Buffon observes, it appears to be much more related to the Onorés, and consequently to the Bitterns.

The Brasilian Bittern is a native of South America, and found in Guiana, as well as in Brasil; where it was first seen by Europeans, and thence obtained it's name of distinction. Marcgrave says, that the neck of this bird measures a foot; and that the total length, from the bill to the tail, is about three feet.

The bill, which is yellowish, is black towards the end; the head, and upper part of the neck, are ferruginous streaked with black; and the feathers on the lower part of the neck are long and loose like those of the Common Bittern, the upper parts of them being rust coloured, and the lower white spotted with black.

The

The back, the coverts of the wings, and the secondaries, are barred with black and ferruginous; the breast and belly are white in the middle, and barred with black on the sides; the tail is barred with black and white; and the legs are of a yellowish brown. Buffon notices, as a circumstance uncommon, that the plumage of this bird is the same on the breast, the belly, and the sides.

Though we have few authenticated particulars of it's general habits, they probably correspond with those of the Common Bittern.

These birds, particularly when young, are esteemed very excellent food; and the Brasilians, who lay in wait for them among the sedges, where they prey on frogs and insects, as well as feed on vegetables, shoot them in great numbers.

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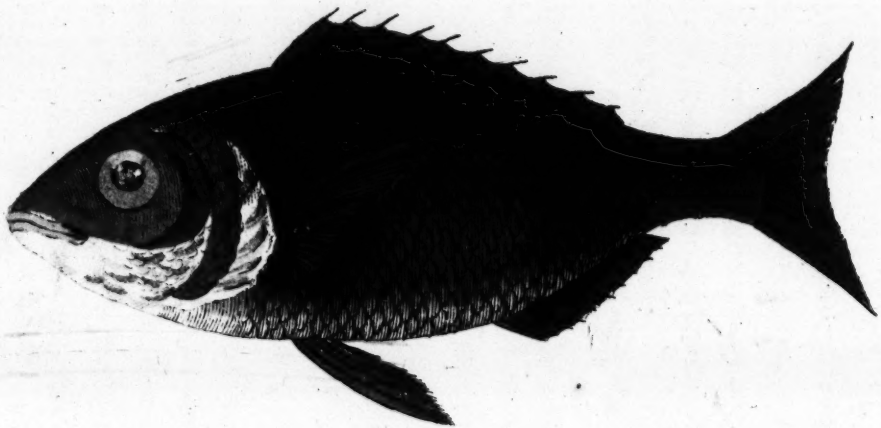

LUNULATED GILTHEAD.

# LUNULATED GILTHEAD.

In the system of Linnæus, this fish, which is a species of the sparus, is denominated Sparus Lunulâ Aurea inter Oculos. This appellation it derives from an arched or semi-lunar gold-coloured stripe between the eyes, which resembles a crescent with the horns pointing towards the head. It is of a broad figure, compressed on the sides, and bears some resemblance to the bream. The back is sharp, and of a dusky green colour; there is usually a black spot at the upper angle of the cover of the gills, and a purple one below them; the teeth in each jaw are oblong and roundish; and the tail is forked. The dorsal fin, which extends almost the whole length of the back, consists of twenty-four rays, the pectoral fins of seventeen, the ventral of six, and the anal fin of fourteen.

This fish is one of the pisces sexatiles, or fishes which haunt deep waters and bold rocky shores. It grows frequently to the weight of more

more than ten pounds; and is plentifully caught, in different parts of the Mediterranean, during the summer months.

It feeds principally on shell-fish, which it comminutes with it's teeth before it swallows them: and, though the flesh is reckoned extremely coarse, it was much esteemed by the ancient Romans, when known to have fed on the Lucrine oyster.

There are, at least, two more species of the Gilthead; one called the Red, and the other the Toothed. The Red Gilthead is in size and shape very little different from the Lunulated, but the whole body is of a red colour: the Toothed Gilthead has, in the lower jaw, two rows of slender sharp teeth, and on each side a slender canine tooth; the upper jaw has only a single row; and the colour of the back is black, the sides are somewhat lighter, and the belly is of a silvery brightness. This species is in several other respects very different from the Lunulated Gilthead.

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WOLVERENE.

# WOLVERENE.

THE Wolverene, or Ursus Luscus of Linnæus, is by most naturalists considered as a variety of the Glutton. The Linnæan name, however, certainly implies the opinion of that great naturalist to have been, that it has affinity to the bear.

The accurate Edwards, whose figure we have adopted, and on whom we can always rely, calls the animal which he has depicted, the Quickhatch, or Wolverene. Buffon remarks, that this animal, which was found near Hudson's Bay, is probably the same with the Canadian Carcajou, and the European Glutton. So confused, however, are the accounts given by naturalists of the Glutton—some resembling it to a badger, some to a fox, some to a hyæna, and others classing it with the weasel kind—that several naturalists, in which number was Ray, have actually doubted of it's existence. Too much incongruity is certainly

certainly discernable in Buffon's account of the Glutton, for us to adopt hastily all the ideas of that ingenious naturalist on this subject.

The Wolverene is about double the size of the fox: it's back is arched; it's head is low; it's legs are short, it's belly almost trailing on the ground; and it's tail, which is of a middling length, is bushy towards the extremity. It has a black, sharp-pointed visage; and short round ears, almost lost in the hair. The head, back, and belly, are covered with reddish hair tipped with black; the sides are of a yellowish brown hue; on the throat, there is a white spot; on the breast, a white crescent; and the legs, which are thick and strong, are of a deep black colour.

This animal rests on it's foot as far as the joint of the leg, like others of the bear kind; and the tail is covered with long coarse hair, reddish at the base, and black at the extremity. The whole body is cloathed with very long and thick hair, varying in colour according to the season of the year.

Though

Though we conceive that, on the whole, the Wolverene more resembles the Carcajou of Canada, than the Glutton, we cannot avoid thinking them different animals. Yet even the Glutton, as described by Pontoppidan, in his Natural History of Norway, seems to wear the same appearance as the Wolverene. This author, after observing that the Glutton which he describes is chiefly confined to the diocese of Drontheim, remarks that the skin is so very valuable, that the animal is not shot with fire-arms, to prevent it's skin from being damaged; and that the hair is soft, and of a black colour, shaded with brown and yellow,

One general description of habits appears to have served all the various naturalists, for these animals.

The Wolverene, the Glutton, and the Carcajou, are indiscriminately charged with the possession of voracious and insatiable appetites: they are all said to be the vultures of quadrupeds; and to be only prevented from destroying every animal of the forests, by the slowness

slowness of their pace. They lurk, however, behind bushes, and in trees; and, suddenly springing on their prey, fasten on the shoulders of a horse, an elk, or a stag, and continue eating a hole into the body of their miserable victim, till the poor animal faints and sinks with agony and loss of blood. They are a terror even to the wolf and the bear; and the beaver, the sable, and other small animals, are their ordinary prey. For the latter, they are said even to visit the traps, without ever being themselves taken in them, and thus to anticipate the human hunters.

After all, we continue to doubt that the Wolverene, or Quickhatch, is the same animal as the Glutton, or even as the Carcajou; the former is mentioned but by few naturalists, the latter have scarcely escaped any.

It may also be remarked that, as some naturalists describe the Wolverene or Quickhatch to be often found in Canada, and America is the universally acknowledged country of the Carcajou, whatever affinity there may be

be between them, it should seem that there must, of necessity, be some obvious distinction.

Buffon, however, positively maintains, in his supplementary remarks, that the American Carcajou is the same animal with the European Glutton; or, at least, that it is a species very nearly allied to the Glutton: but, he owns his conviction, that it is not the same animal as the Kinkajou, which some naturalists have imagined, whose opinion he had formerly adopted. He observes, that Gmelin is the only writer who seems to think that the Glutton travels into warm countries: but this fact, he adds, appears very suspicious, if not entirely false. Gmelin, like some other naturalists, among whom is Brisson, has perhaps confounded the Hyæna of the south, with the Glutton of the north; which, though they resemble each other in natural dispositions, and particularly in voraciousness, are very different animals.

To the increase of the fur trade, we chiefly owe

owe the improved knowledge which we have of many animals in the various tribes which contribute to the supply of that beautiful and comfortable article of cloathing, and of dress, during the winter seasons of our northern clime; and, from it's augmentation, we shall probably derive, in time, more decisive information on these subjects.

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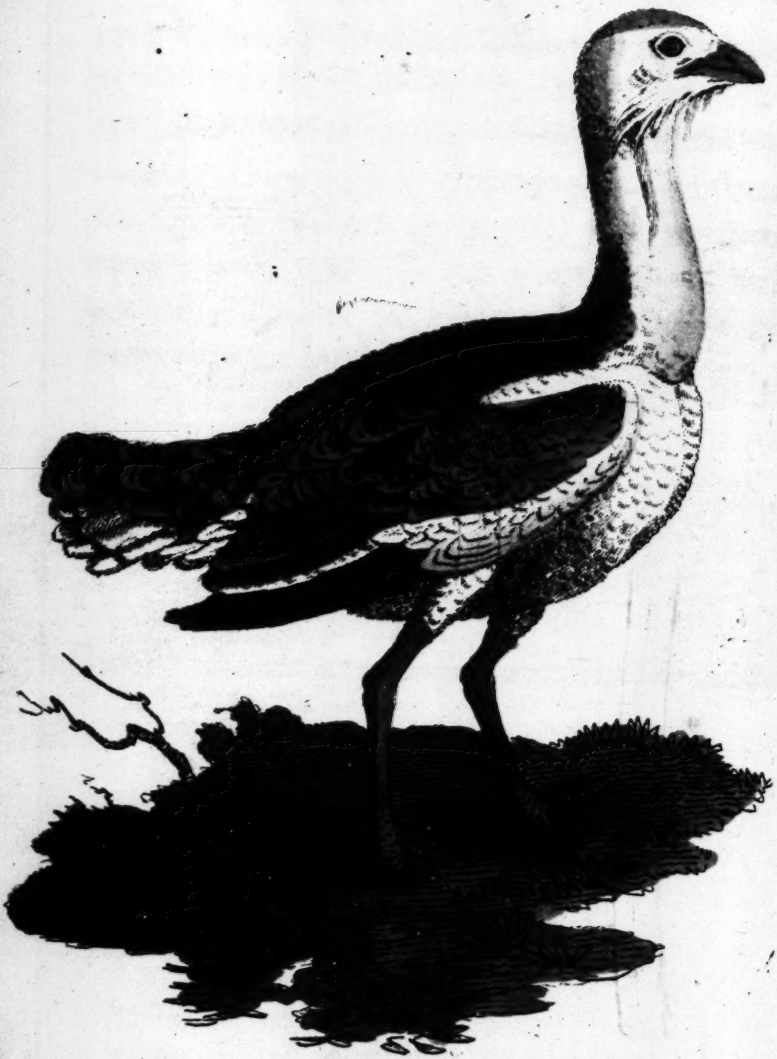

BUSTARD.

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# BUSTARD.

THE Bustard, is in Greek called Otis; and, in Latin, Avis Tarda, or the Slow bird: from which last, the Italian name, Starda, seems to be derived; and, from that, the old French term Bistarde, and the English Bustard.

But though the Greeks called it Otis, and Aristotle, whose description perfectly agrees with our Great Bustard, mentions it by this name in three places, the Latins, deceived probably by the resemblance of the words, frequently confounded it with the Otus, which is a nocturnal bird. Pliny, after properly saying, that the bird named Otis by the Greeks, is called Avis Tarda in Spain, which character applies to the Great or Common Bustard; subjoins, that it's flesh has a rank taste, which agrees with the Otus, according to Aristotle and to fact, but has no reference to the Great Bustard: and this mistake may be the more easily supposed, since Pliny, in the following chapter, evidently confounds the Otis with the

Otus;

Otus; that is, the Great Bustard, with the Eared Owl.

A long and laborious account is given by Buffon, of the errors into which several distinguished naturalists have fallen respecting this bird; which he denominates, l'Outarde.

The Bustard, or Otis Tardis, in the Linnean system, forms a distinct genus of birds, of the order of Grallæ; the distinguishing characters of which are, that the feet have only three toes each, and those all placed before; that the upper mandible of the bill is arched; that the nostrils are ovated; and that the tongue is bifid.

The Great, or Common Bustard, is said to be found in Lybia, in Syria, in Greece, and in Spain; in France, in the plains of Poitou and Champagne; in the open countries situated on the east and south of Great Britain, from Dorsetshire to the Mers and Lothians in Scotland; in the Netherlands, and Germany; and in the Ukraine, and Poland, where it passes, according to Rzacynski, the winter in the

the midst of snow. There are, however, some differences in the colours of the plumage, in the bill, &c.

The Bustard is the largest land bird of Great Britain. It is much bigger than the turkey; the male, on an average, weighing above twenty-five pounds. It's breadth is about nine feet, and it's length nearly four.

The male has a tuft of feathers, about five inches long, on each side of the lower mandible; the head and neck are cinereous; the back is barred transversely with black, bright, and rust colour; the greater quill feathers are black; the belly is white; the tail, which consists of twenty feathers, is marked with broad bars of red and black; and the legs are of a dusky colour.

The female is about half the size of the male. The crown of the head is of a deep orange colour, traversed with black lines, and the rest of it is brown. The lower part of the neck before is ash-cololured; but, in other respects,

respects, she resembles the male, except that the colours of the back and wings are brighter.

Bustards were once far more common in England than at present; the increased cultivation of the country, and the extreme delicacy of the flesh, have occasioned great havock with this species. They are, however, still frequently seen, in flocks of more than fifty, on the extensive downs of Salisbury Plain; on Newmarket and Royston Heaths, in Cambridgeshire; and on the Dorset uplands. In these situations, where there are neither woods nor hedges to screen the sportsman, they enjoy a kind of indolent security. They feed on herbs, grain, and every kind of seed. But their chief food seems to be, those large worms which, during the milder months, swarm before sun-rise on the downs, and the numerous berries which grow among the heath. In vain does the fowler creep forward to approach them; they have always centinels placed on proper eminences, which incessantly keep watch, and warn the flock on the smallest appearance of danger. But though they cannot be reached by a fowling-piece, they are sometimes

sometimes run down by greyhounds. Being voracious and greedy, they often sacrifice their safety to their appetites; and, as they are generally very fat, they are unable to fly without much preparation: when, therefore, the greyhounds come within a certain distance, the Bustards run off, clap their wings, and endeavour to gather under them air enough to rise; in the mean time, the dogs are continually gaining ground, till at last it is too late for flight. However, notwithstanding the sluggishness of their usual pace, they can, when in danger, run very fast; and, once fairly on the wing, are able to fly several miles without resting.

As there are but few places where Bustards can at once find proper food and security, they seldom wander above twenty or thirty miles from home; and, their food being replete with moisture, they are enabled to live on plains, where there are scarcely any springs of water. Nature, however, as a security against drought, has furnished the males with a pouch, the entrance of which lies immediately under the tongue, and which will contain nearly

nearly seven quarts of water. With this, it is probable, they supply the hens when sitting, and the young till they are able to fly.

Like other birds of the poultry kind, Bustards change their mates at the season of incubation, which is about the latter end of summer. If the number of males and females be equal, they separate in pairs; but, should the males prove most numerous, they fight till reduced to an equality. They build their nests on the ground, by scraping holes in the earth, and sometimes line them with a little straw or grass. The hen lays only two eggs, which are not so large as those of a goose; they are of a pale olive brown, sprinkled with small dark spots. They are about five weeks in hatching; and the young ones run about the moment they are emancipated from their shells.

Bustards generally live about fifteen years; but they cannot be propagated in a domestic state, as it is impossible to supply them with a sufficiency of that food in which they principally delight.

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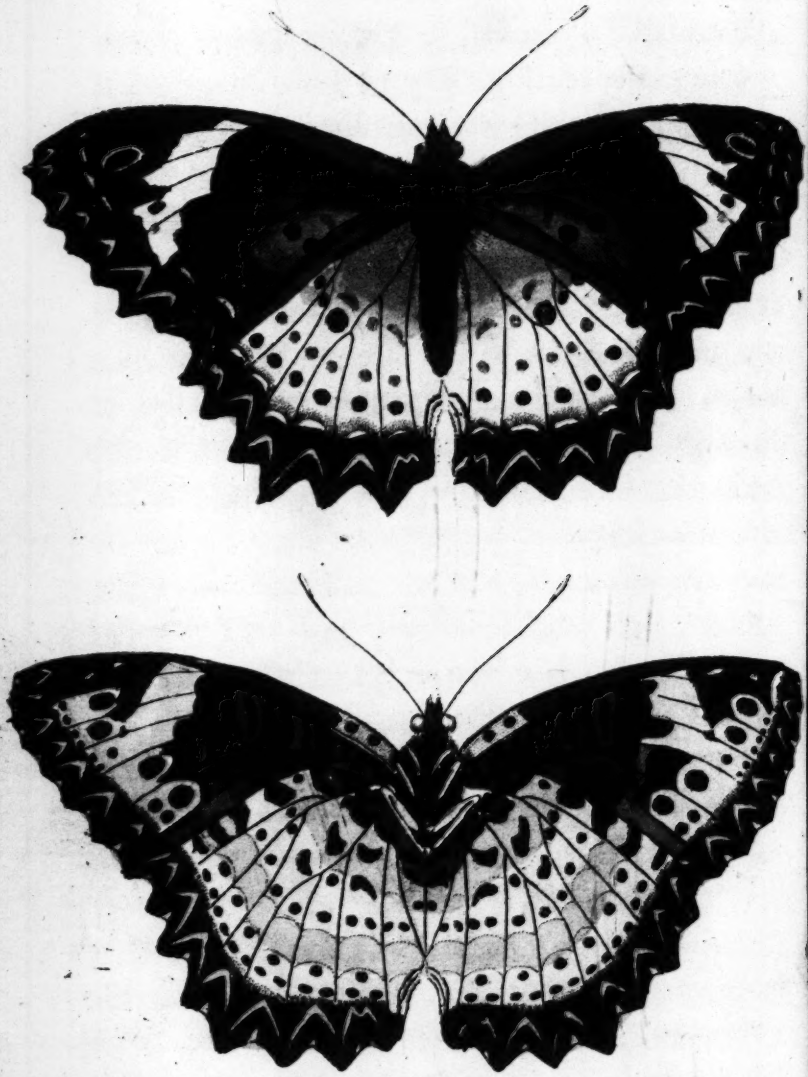

CYANE OR ZIGZAG.

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# CYANE; OR, ZIGZAG.

THIS fine, large, and beautiful Butterfly, is a native of the East Indies. It is called the Cyane; or, Zigzag: and the object which we have given, was figured by that ingenious aurelian, the late Mr. Moses Harris; who informs us that it came from Siam, and that the expansion of it's wings is full three inches and three quarters.

From the material differences between the upper and under sides of this butterfly, both sides are separately delineated, and it will therefore be proper to describe them, as much as possible, in a similar manner.

The head, thorax, and abdomen, are of a dark brown. The ground of the superior wings is black; but of an orange brown towards the thorax, with a long dash of light blue down the long tendon, which is the second from the slip or lower edge. About half way,

way, there is a broad, irregular, whitish or cream-coloured bar, which crosses the wing to within a quarter of an inch of the fan-edge. The under wings are of a milky or cream-coloured white; having three rows of black spots crossing the wings from side to side, parallel to each other, amounting to about twenty-one in each wing. They are all bordered with a band of black, which is about a quarter of an inch broad; ornamented with a beautiful and very peculiar zigzag line, which gives the English appellation to this fly. This zigzag line, taking it's beginning from the tip or apex of one of the superior wings, continues all along round the borders of each of the four wings, till it reaches the tip of the other superior wing.

The under side of this Butterfly has a broad zigzag border, similar to that of the upper, but a little narrower in the under wings. The general ground of the four wings, on this side, is a sort of cream-colour; the inferior wing being spotted similar to the upper side, pretty large, and crouded near the thorax, where the ground

ground is blue, as it is on the table-tendon or upper edge. The superior wing is ornamented with black spots or clouds of various forms. There are four remarkable round or oval ones near the outward border; and those which seem to croud near the shoulders are ornamented with blue and red, which separate or surround them in a manner not easy to be described. The legs are white; and the thorax is of a dark brown, having two black marks on each side.

This Butterfly, though sufficiently common in different parts of the East Indies, is not very often brought to Europe. It is, notwithstanding, well known among aurelians; and may be seen in most cabinets of consequence, such as we have described it. We cannot, however, boast any knowledge of it's peculiar habits; and are even uninformed as to it's appearance, either in the caterpillar or chrysalis state.

Goldsmith remarks, that the number of Butterflies is prodigiously great; and that, though Linnæus has reckoned up above seven hundred and sixty different kinds, the catalogue is still

still very incomplete. Every collector, he adds, can here shew undescribed species; in general, however, those of the warm climates are larger and more beautiful than those bred at home. Such, indeed, is their extreme beauty, in the eastern nations, that they form one of the principal ornaments of oriental poetry.

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LITTLE INDIAN BUFFALO.

# LITTLE INDIAN BUFFALO.

THE generality of naturalists seem to be but little acquainted with this species of the Buffalo; the accuracy of the figure, however, may be fully relied on, having been originally published by Edwards, from a drawing communicated to him by Sir Hans Sloane.

He denominates it the Little Indian Buffalo, and describes it as growing to the size of a calf six months old. It resembles the English bull in shape; except that it has very short horns, and a bunch rising on the back, between the shoulders, somewhat like that of the camel.

The nose is broad, flat, and destitute of hair: on the lips, or muzzle, there are some loose, shaggy, straggling hairs; and the hair on the inside of the nose is whitish. The horns, which are small, and of a dark colour, appear but a little way above the rough hair on the top of the head; and the ears are much longer,

as well as larger, than the horns, being of a flesh colour, and internally destitute of hair. The body is wholly covered with sleek hair; that on the head, neck, tail, back, and sides, being of a blueish colour. The loose skin on the neck is white; and the belly is covered with so small a quantity of lightish hair, that it shews the flesh colour. The legs are of a light colour, spotted and marked with black, and become gradually whiter towards the feet. The tuft of hair at the extremity of the tail is black; and the hoofs, which are shaped like those of the cow, are of a dark brown.

Buffon, who has greatly laboured and expanded his account of the Buffalo, under one general head, comprehending also the Bonasus, the Urus, the Bison, and the Zebu, considers this Little Indian Buffalo as the latter animal, and merely a variety of the common ox. This, he says, may be easily proved, by simply referring to the figure of the animal given by Belon, Prosper Alpinus, and Edwards, and to his own description of it. He saw it alive: and the conductor told him, that it came from Africa, where it was called Zebu; and that it

was

was domestic, and used for riding. It is, indeed, a very mild, and even a fond animal. It's figure, though thick and squat, is quite agreeable; and such appears to him it's perfect resemblance of the ox, that he declares it not within his power to give any better idea of it, than by remarking that, if a handsome bull were viewed through a glass which diminished objects one half, this contracted figure would be that of the Zebu.

In a minute description of this animal, made by Buffon, in 1752, he observes, that this small ox has a perfect resemblance to that of Belon. It's crupper is round, and plumper than that of the common ox. It is so gentle and familiar, that it licks the hand like a dog, and caresses every person who approaches. It is a very beautiful animal; and it's intelligence seems to be equal to it's docility. The owner observed, that it was brought from Africa, and that it's age was twenty-one months. The distance between the horns was little more than four inches: they were one foot two inches in length; and six inches in circumference at the base; and, at half an

inch

inch from the points, only an inch and a half. They are of the ordinary colour of horn; and black near the extremities, which are one foot seven inches distant from each other. The bunch, consisting entirely of flesh, is seven inches in perpendicular height; the hair which covers it being blackish, and an inch and a half long. The tail to the end of the vertebræ is little more than two feet in length; but, including the hair which hangs down to the ground, it is two feet ten inches and a half. The longer hairs of the tail measure one foot three inches; the testicles are a foot and half distant from the anus; and it has four paps, situate like those of the bull.

To this we may add the description given by Belon; with which, Buffon observes, his own very well corresponds.

Belon says, it is thick, fat, smooth, and well shaped. It is old, though it's body is not so large as that of a stag: but it is more squat, and thicker than a roebuck; and so neat and compact in all it's members, that it is extremely agreeable to behold. It's feet resemble

those

those of the ox, and it's legs are short and squat; it's neck is thick and short, and the dewlap very small. It has the head of an ox, and the horns rise from a bone on the top of the head: these are black; much notched, like those of the gazelle or Barbary antelope; and formed like a crescent. It has the ears of a cow: it's shoulders are plump, and a little elevated; and it's tail is long, and covered with black hair. It has the appearance of an ox, only it is not so tall. Belon adds, that this small ox was brought to Cairo from Azamia; a province of Asia, and that it is also found in Africa.

Prosper Alpinus, who describes this animal, and gives a figure of it, as well as Belon, says that it is found in Egypt.

His description, Buffon observes, agrees with his own, as well as with that of Belon. The only differences between the three, are in the colour of the horns and the hair. The Zebu of Belon was yellow on the belly, brown on the back, and had black horns; that of Prosper Albinus was red, marked with small spots,

spots, with horns of the ordinary colour; and Buffon's was of a pale yellow, almoſt black on the back, with horns of the same colour as those of the common ox. In the figures of Belon, and Prosper Alpinus, the bunch on the back is not sufficiently marked.

The opposite error, Buffon asserts, takes place in the figure which Mr. Edwards has given of this animal.

Besides, he ventures to add, the figure is incompleat; for it seems to have been drawn from a very young animal, whose horns were only beginning to shoot. It came, Mr. Edwards says, from the East Indies, where these small oxen are used as we use horses. From all these hints, and likewise from the varieties in the colour, and the natural mildness of this animal, it is apparent, Buffon concludes, that it belongs to the bunched race of oxen, and has derived it's origin from a domestic state.

After this article was published by Buffon, a Zebu having been brought to the Royal Menagerie, he gives what he calls a more perfect description;

description; from which, notwithstanding his former suggestion as to the youth of the Little Indian Buffalo of Edwards, our ingenious countryman appears to have been perfectly right.

This is Buffon's new description—The Zebu was not larger than a calf of nine weeks old. We knew it, however, to be an adult, and at least seven or eight years of age, by inspection of it's teeth. It arrived at the menagerie of Versailles in August 1761, and it's horns were then as large as they are now in the year 1763. They are five inches three lines long, and four inches three lines in circumference at the base. They are black at the points, and in every other respect resemble those of the common ox. It has a bunch on the withers four inches and a half high, and it's circumference at the base is sixteen inches. In other respects, it differs not in figure from our ox; except that it's legs and feet are proportionably smaller, and it's ears larger.

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The tuft of hair above the coronet is black; the legs and upper part of the tail are yellowish;

ish; the under part, and the long hairs at the point of the tail, are white, and a foot in length; and the rest of the body is variegated with black and brown spots of different dimensions, and slightly tinged with a reddish colour.

Buffon adds, that he had learned, from fresh enquiries, that the Zebu is probably the same animal which is called the Lant, or Dant, in Numidia, and several other northern provinces of Africa, where it is very common; and that the name Dant, which solely pertains to this animal, has been transported from Africa to America, and given to an animal which has no resemblance to the former but in the size of it's body, and belongs to a very different species. This American Dant is, in fact, he says, the Tapir, or the Maipouri; and the African Dant alone, which he considers as our Zebu, the Little Indian Buffalo of Edwards.

15 70 MAY

BLACK CAPPED LORY.

# BLACK-CAPPED LORY.

THE name Lory, Buffon remarks, has been applied, in the East Indies, to a family of parrots, whose cry resembles the sound of the word Lori. They are hardly distinguished from the rest of the genus, except by their plumage, which is chiefly red. The bill is also smaller, and less hooked, but sharper, than that of any other Parrot. The aspect of the Lory is lively, it's voice is shrill, and it's motions are quick. It is, according to Edwards, the most nimble of all the Parrots; and is, in fact, the only one that can leap to the height of a foot. It is easily taught to whistle, as well as to articulate words; soon grows tame; and, what is uncommon in all animals, retains it's chearfulness in captivity. This bird, which is in general very delicate, and difficult to transport, seldom lives long in the temperate climates of Europe. Even in it's native regions, it is subject to epileptic fits, like the Maccaw and other Parrots; at least, when in a domesticated state. Sonnerat, in his Voyage

a la

a la Nouvelle Guinée, observes that ornithologists have improperly discriminated the different species of the Lory, by the epithets of the Philippine, the East-Indian, the Chinese, &c. These birds, he maintains, inhabit only the Moluccas, and New Guinea; from whence, wherever they may be found, he is persuaded that they must have been originally carried. Of still greater impropriety are those guilty, who rank some species of the Lory as natives of America, since none exist in that quarter of the globe; and, if travellers have seen a few individuals, they have been introduced from the Asiatic islands. He adds, that the Lories in one island, he constantly found, were of a different species from those in another, though at a short distance only. A similar observation has been made respecting the islands of the West Indies.

The Black-Capped Lory, or Psittacus Lory of Linnæus, is a very beautiful bird. Brisson calls it the Lorius Philippensis, or Lory of the Philippine Islands.

This species, which is about the size of the turtle-

turtle-dove, and is a native of the East Indies, has an orange-coloured bill. At the base of the upper chap there is a dusky flesh-coloured skin; and the eyes are encircled with a bright gold-coloured iris, beyond which there is a bare skin of an obscure flesh-colour. The crown of the head is covered with black feathers, those on the hinder part having a bluish cast: the other parts of the head, the neck, back, rump, the covert feathers above the tail, the breast, and the upper part of the thighs, are of a bright scarlet hue; except a space behind, between the neck and the back, which has a small admixture of red, and another on the lower part of the breast also mottled with red. The belly, the lower parts of the thighs, and the coverts beneath the tail, are of a fine blue colour; and the upper part of the tail is also blue, except that the central feathers have somewhat of a blackish tinge. The inner webs of the tail feathers are yellowish; the upper sides of the wings are green; and some of the middle feathers are yellow on the borders of their webs. The inner webs of the quills are of a beautiful yellow hue; except at the tips, where they are dusky, and the

covert

covert feathers on the insides of the wings, which are red with a slight admixtpre of yellow.

Buffon denominates this bird the Tricolor Lory; an epithet which he has been induced to give it, from the fine red, azure, and green, which are disposed in large spots on the plumage. The bird is nearly ten inches long; and few, he thinks, are so beautiful, as well from the brilliancy of the colours as their elegant contrast.

Edwards, who saw it alive, says that it whistled pleasantly, and pronounced several words distinctly; and, leaping briskly on it's roost, or even the finger, it called with a clear voice—"Lory! Lory!" It played with the hand; and ran after any one, hopping like a sparrow. This charming bird, however, lived but a few months in England.

The Lory is considered, by naturalists in general, as connecting the chain of Parrots, from the Maccaw, the largest of the tribe, to the Parroquet, which is the smallest; but to this

this there seems an objection, which has not hitherto been remarked, since there are several Parroquet Lories, enumerated by Buffon, which bear the same affinity, in every thing but size, to the Lory in general, as the common Parroquet does to the Parrot properly so called, which is less than the Maccaw and larger than the Lory.

It is not a little remarkable, that Goldsmith, in speaking of the various classes of Parrots, barely mentions the Lory, and what he does say seems unaccountably absurd. These are his words—

"The large kind, which are of the size of a raven, are called Maccaws; the next size are simply called Parrots; those which are entirely white, are called Lories; and the lesser size of all are called Parakeets."

This is all the account—we cannot say, the information—which Goldsmith affords us respecting the Lory, which is considered as by far the most valuable of all the several descriptions of the Parrot tribe: ten reals being a common

common price in the East Indies, for a single bird of this class, called the Noira Lory, by Buffon; and which the natives of Ternate, Ceram, and Java, where it is found, as well as the Dutch and Portuguese, call simply the Noira. In the narrative of the first voyage from Holland to Java, it is said that several of these beautiful birds, which the Dutch were endeavouring to bring home, all died during the passage: in the second voyage, however, one was carried to Amsterdam; and, since that time, Buffon tells us, they have continued to be occasionally imported. He adds, that this bird shews strong attachment, and even affection, to it's master: it caresses him with it's bill, and strokes his hair with surprising gentleness and address; but, at the same time, expresses an aversion to strangers, and bites them with much apparent rancour.

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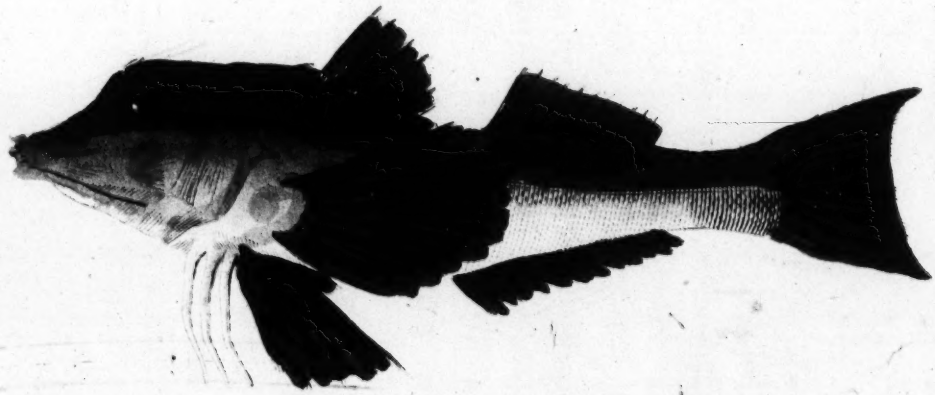

SAPPHIRINE GURNARD.

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# SAPPHIRINE GURNARD.

THE Gurnard, or Trigla of Linnæus, is a genus of marine fish, consisting of several species: particularly, that esteemed food, celebrated by Shakspeare, the Grey Gurnard, or Trigla Gurnardus of Linnæus, which is the most common, and frequently found in the British seas; the Red Gurnard, or Trigla Cuculus of Linnæus, called also the Rocket, and agreeing with the tub-fish in it's general appearance; and the Sapphirine Gurnard, or Trigla Hirundo of Linnæus.

To all that were then known of these species, the Latins gave the general name of Cuculus, from the supposed imitation which the sound issued by this fish bears to the voice of the Cuckow; and it is probable that, from a different idea of that sound, which to the ears of our ancestors, as well as ourselves, seemed, and still seems, more of a grunting noise, like that of a pig, than the distinct articulation of a cuckow, it has obtained the English appellation of the Gurnard.

Of

Of the Gurnard, in general, the distinguishing characters are, that the nose slopes; the head is covered with strong bony plates; there are seven branchiostegous rays; and three slender appendages at the base of the pectoral fins.

The Sapphirine Gurnard, delineated in the annexed figure, is frequently caught on the Cornish coast, and some other parts of the British seas. It is particularly beautiful; and has, certainly, some not very remote resemblance, when swimming, to the swallow in the act of flying; to which circumstance it is obviously indebted for it's Linnæan name. This fish is distinguished from every other species of Gurnards, by the breadth and colour of the pectoral fins, which are very broad and long, and of a pale green hue, most beautifully spotted and edged with a rich deep blue. The dorsal fins are lodged between two rays of spines of a serrated form; the back is of a greenish cast; the lateral line is rough; the sides are tinged with red; the body is white; and the eyes, the pupils of which are green, have two small spines on the inner corner of each.

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# WILD BOAR.

THE Hog, the Hog of Siam, and the Wild Boar, are joined by Buffon, in one single description: because, as he observes, they form but a single species; the Wild Boar being the original, and the other two the same animal in a domestic state.

These animals are remarkably singular. Their species is solitary, and detached: it is approached not by any neighbouring species which, like that of the horse and ass, and of the sheep and goat, may be regarded as principal or as accessory; neither is it subject to a variety of races, like that of the dog. It participates of several species, but essentially differs from the whole. Let those, says Buffon, who wish to limit the immensity of Nature to the contracted views of imperfect systems, attend to this animal, and they will discover that it eludes all their methodical arrangements.

It's feet, which are cloven hoofed, have not only no resemblance to the whole hoofed tribes,

tribes, but they actually do not resemble the cloven hoofed animals: because, though the hog appears to have two toes only, it has four concealed within. It has no resemblance to the digitated quadrupeds: because it walks on two toes only; and the other two are neither so situated, nor so far extended, as to serve the purposes of walking. Cloven footed animals have horns, and no cutting teeth in the upper jaw; they have four stomachs, chew the cud, &c. but the Hog has no horns, only one stomach, does not ruminate, and has cutting teeth both above and below. It is evident, therefore, that it belongs neither to the genus of whole hoofed, nor to that of cloven hoofed, animals. As little pretension has it to be ranked with the digitated quadrupeds: for it differs from them, not only in the extremity of it's foot; but, still more, in it's teeth, stomach, intestines, internal parts of generation, &c. So that, in some respects, it forms the link between the whole hoofed and cloven footed animals; and, in others, between the cloven footed and digitated animals. In the number and arrangement of it's teeth, it differs less from the whole hoofed quadrupeds,

than

than from the other kinds: it resembles them, too, in the prolongation of the jaws, as well as in having but a single large stomach; yet, by an attached appendage to this stomach, as well as by the position of the intestines, it seems to approach the cloven footed or ruminating race, and it likewise resembles them in the external parts of generation. At the same time, in the form of it's legs, in the habit of it's body, and in the number of it's progeny, it resembles the digitated quadrupeds. It also affords a kind of exception to two general laws of nature: one, that the larger the animals, the less they are prolific; the other, that digitated animals are the most fertile. Though of a size far beyond mediocrity, it is well known to produce more than other quadrupeds.

In short, the Hog seems to be of an equivocal nature; or, rather, it appears so to those who mistake the hypothetical arrangement of their own ideas for the common order of Nature, and only perceive, in the infinite chain of being, some conspicuous points, to which they would refer every natural phænomenon.

The

The fat forms another peculiarity. It is not intermixed with the flesh, as in the human body, the dog, the horse, and other animals which have no suet; nor is it, like the suet of the deer, goat, sheep, &c. placed at the extremities of the flesh: for the lard of the Hog covers the whole animal, in the form of a thick, distinct, and continued stratum, between the flesh and the skin; a phænomenon observable only in the whale and other cetaceous animals. What is still more singular, it never sheds it's fore-teeth, which always continue to grow. Besides twenty-eight grinders, it has six cutting teeth in the under jaw, and a corresponding number in the upper: but, by an irregularity, of which there is not in nature another example, the figure of the six teeth in the under jaw is different from those in the upper; for, instead of being sharp and cutting, they are long, cylindrical, blunt at the points, and form nearly a right angle with those of the upper jaw, so that their extremities apply to each other in a very oblique manner. Tusks are peculiar to the Hog and a few other animals: they differ from other canine teeth, by extending out of the mouth, and

continuing

continuing to grow as long as the animal lives, which is sometimes twenty-five years. In the elephant and sea-cow, they are cylindrical, and placed in the upper jaw only; but, in the Wild Boar and Hog, they are flat, and arm both jaws: those in the under being the most formidable, and chiefly used by the Wild Boar to wound it's assailants. The tusks of the Wild Boar, are larger than those of the domestic Hog, being sometimes ten inches in length; it's head is also longer, and it's snout has more strength: it's feet, too, are larger, and it's toes more separated. The Wild Boar is always black; or rather, perhaps, of an iron grey, inclining to black.

The Hog is considered as the rudest and most brutal of quadrupeds; it is, in fact, a compleat picture of sensuality! All it's habits are gross; all it's appetites impure: all it's sensations confined to a furious lust, and a brutal gluttony. It devours, indiscriminately, every thing that comes in it's way; frequently, even it's own progeny, the moment after their birth: yet, it is remarkable, it never attacks or devours other living animals.

The

The rudeness of the hair, hardness of the skin, and thickness of the fat, render it little sensible of slight blows; and, Buffon says, it has even been known to have had mice lodged on it's back, and devour it's skin and fat, without discovering any mark of sensibility. It's other senses, however, are extremely acute. The Wild Boar hears and smells at so great a distance, that the hunters are obliged to watch it in silence during the night, and place themselves opposite the wind to prevent it's smelling them.

The Wild Boar, till it has passed the third year, follows the sow, and lives in a common herd, which unite their forces against the wolf and other enemies. But it no sooner arrives at a state of maturity, than it becomes conscious of it's own strength, and traverses the forest undaunted and alone. It has, then, no apprehensions from any single enemy; and disdains to fly even from man himself.

The female, in the wild state, produces but once a year, generally in May or June. In the rutting season, which is January or February,

ary, the male follows the female, and remains with her about thirty days in the thickest and most solitary retreats of the forest. He is then most ferocious; and, if another male endeavours to occupy his place, becomes perfectly furious: they fight, and not unfrequently kill each other. The sow never rages, except when her young are attacked: and, in general, it may be remarked, that the males of most wild animals during the rutting season, and the females after they bring forth, become more or less savage.

Hunting the Wild Boar was formerly a very favourite diversion even in England. The animal flies slowly; and, frequently turning, defends itself against the dogs, and often kills many of them. The snout of an old Wild Boar is the only part which is esteemed: but the ancients castrated the young Boars, when they could contrive to take them from their mothers; and, returning them to the forests, they grew fat, and made far better pork than that of the domestic Hog.

These animals, though very numerous, and diffused over Europe, Asia, and Africa, existed not

not in America, Buffon says, till they were transported thither, and to most of the American islands, by the Spaniards. These, in many places, have so multiplied, as to become wild.

The Mahometans, like the Jews, consider swines flesh as unclean; but the Chinese, who are extremely fond of pork, rear Hogs in numerous herds, and the flesh is their commonest food. The Chinese Hogs, as well as those of Siam and India, differ from the common kind; chiefly, however, in being smaller, having shorter legs, and affording a whiter and more delicate flesh. They are by no means uncommon in Europe; and will intermix and produce with the domestic Hog. The Hog of Siam has a greater resemblance to the Common Hog than to the Wild Boar.

Buffon observes, that the ears furnish the most evident mark of degeneration; for they become more supple, soft, inclined, or pendulous, in proportion as the animal is altered, or softened, by education, in a domestic state, from the Wild Boar, which must be regarded as the model of the species.

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KING OF THE VULTURES.

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# KING OF THE VULTURES.

THIS bird, is the Vultur Papa of Linnæus; the Vultur Monachus of Klein; the Cozcacoauhtli of Ray; the Queen of the Auræ of Willughby; and the Rex Vulturum, or King of the Vultures, of Brisson, Edwards, Buffon, and most other naturalists. The latter takes notice, that Edwards, who had seen several of the birds in London, has given an excellent figure, and a correct description.

Buffon, who has collected the remarks of the different authors relative to the nature and structure of this bird, as well as given his own observations, begins with asserting that it is an undoubted Vulture; it's head and neck being naked, which is the most discriminating character of the genus.

It is not, however, so large; the extreme length of the body never exceeding two feet two or three inches, and it's circumference about that of the female turkey. It's wings, compared

pared with those of the other Vultures, are shorter; and it's bill is thick and short, and begins it's curvature only at the point. The bill is sometimes entirely red; at others, red only at the extremities, and black in the centre. The cere, which is of an orange colour, is broad, and stretches from each side to the crown of the head. In this cere, the nostrils are placed: they are of an oblong shape; and, between them, the skin projects like a loose jagged comb, falling on either side, according to the motion of the head. The eyes are surrounded by a scarlet skin, and the iris has the colour and lustre of pearl. The head and neck are naked of feathers; the crown being covered with a flesh-coloured skin, which is of a lively red behind, and a darker before. Below the hinder part of the head, there rises a small tuft of down; from which, on each side, under the throat, a wrinkled skin extends, of a brownish colour, mixed with blue and red near it's termination, the whole being marked with small lines of black down. The cheeks, or sides of the head, are clothed with a similar black down; and, between the bill and the eyes, behind the insertion of the mandibles, there

there is a brown purple spot. On each side of the upper part of the arch of the neck, is a small longitudinal line of black down, the space between the two being of a dirty yellow colour. The sides of the arch of the neck are red; passing, in the descent, by insensible shades, into a yellow. Under the naked part of the neck, there is a collar, or ruff, composed of longish soft feathers of a deep ash-colour: this collar, which entirely surrounds the neck, and descends on the breast, is so broad that, when the bird contracts itself, it can conceal the neck and part of the head, in the manner of a cowl; to which circumstance it owes it's denomination of Monachus, or Monk, given to it by Klein and some other naturalists. The feathers on the breast, the belly, the thighs, the legs, and the under surface of the tail, are white, slightly tinged with yellow: those of the rump, and the upper surface of the tail, are observed greatly to vary; being black in some, and in others white. The other feathers of the tail are constantly black, the great feathers of the wings are also black, but commonly edged with grey. The feet are, in some, of a dull white, or yellowish,

and

and the nails blackish; in others, the feet and nails are both reddish. The nails are very short, and but slightly curved.

This bird, Buffon says, is a native of South America; and not of the East Indies, as some authors have asserted. He observes that, in his extensive search among the works of travellers, he has not discovered the smallest indication of the King of the Vultures, among the birds of Africa and Asia. He concludes, therefore, that it is peculiar to the southern regions of the new continent, and is not found in the old. It may, he adds, be objected that, as the Ouroutaran, or Eagle of Brasil, frequents both the African and American shores, which he admits it does, the King of the Vultures may enjoy the same extensive range. But, though Fernandez says that this bird rises to a great height, holding it's wings much extended; and, that it's flight is so vigorous that it withstands the most furious winds; Buffon thinks it probably unequal to the journey: remarking that, in general, the Eagles fly better than the Vultures. Besides, he concludes, this bird is delicately sensible of cold;

cold; and, therefore, could not pass by the north. At all events, he expresses his certainty, that the King of the Vultures is confined to it's natal region, and haunts the tracts between Brasil and New Spain.

Edwards tells us, that the person who shewed these birds in London, assured him that they came from the East Indies; notwithstanding which, he supposed them to be American.

The King of the Vultures, is said to attack only weak victims. It feeds on rats, lizards, and serpents; and will devour the dung of animals, and even human excrement. It has, accordingly, a very disgusting smell; and it's flesh is so rank, that even the savages will not eat it.

The common notion, that Vultures never prey on any living animals, is a vulgar error. It is true that they want the bold and vigorous character of the eagle, and are of a mean and filthy nature: confining their depredations to such animals only as are easily mastered

tered, and feeding voraciously on dead carcases of every description, however putrid.

Of this very disgusting tribe, the King is by far the most beautiful; and the figure which we have given is precisely that of Edwards, so highly praised by Buffon.

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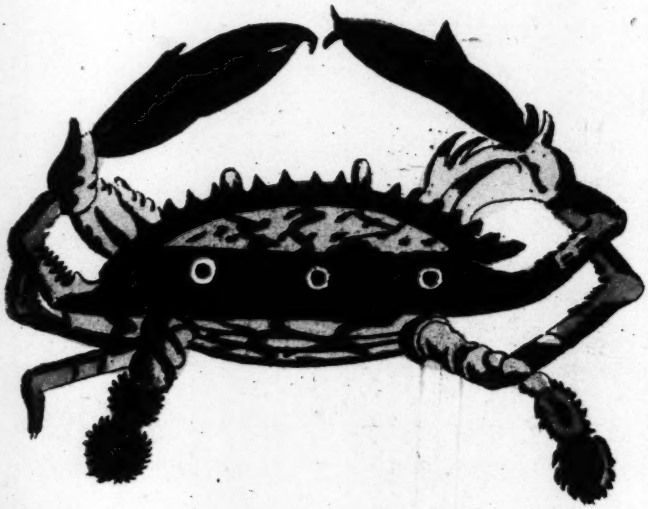

INDIAN SEA-CRAB.

Published August 1, 1798 by Harrison, Cluse & Co. N.° 78 Fleet Street.

# INDIAN SEA-CRAB.

THIS curious and beautiful species of the Crab is found on the coast of the oriental seas; from which circumstance it derives it's appellation of the Indian, or East Indian, Sea Crab.

It is mentioned, and has been delineated, by several naturalists; chiefly on account of it's singularity and beauty: none, however, have given any particulars of it's habits, which may therefore be supposed similar to those of the ordinary species.

It is described as being about a span long, and of a very singular colour. The shell, in general is speckled with yellow spots, except where three purple ones appear inclosed by a circle of white.

The claws, next the body, are yellowish; they are white in the middle; and, at the extremities, they are of a deep purple.

The

The eyes project in a remarkable manner, to the distance of an inch from the head.

There is something extremely pleasing in the colour and general appearance of this Crab; which is said to be a very delicate food, and much relished by Europeans.

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AFRICAN TORTOISE.

Published Sept.r 2.nd 1796 by Harrison & Co.y N.o 18 & 19 Ludgate Street.

# AFRICAN TORTOISE.

IN the Linnæan system, the Tortoise forms a distinct genus of animals of the class of amphibia, and order of reptiles; the characters of which are—that the body has four feet, is defended by a thick crust, and furnished with a tail, and the naked mandibles are without teeth. Of this genus, Linnæus enumerates fifteen species.

It has been customary to divide Tortoises into two classes; those which live on land, and those which subsist in the water. Use has also made a distinction in the name: the former being called, the Tortoise, or Land Tortoise, and the latter, the Turtle, or Sea Turtle.

Seba, however, has satisfactorily demonstrated, that the Land Tortoise will live in the water, and that the Sea Tortoise, or Turtle, can exist on the land; consequently, that they are both amphibious, though their general

ral habits are respectively most prone to the situations from whence they derive their popular names of distinction.

In their external form they all pretty much resemble each other; their outward covering being composed of two great shells, the one laid on the other, and only touching at the edges: when, however, we come to inspect them closer, we find the upper shell to be composed of no less than thirteen pieces, laid flat on the ribs, like the tiles of a house, by which the shell is kept arched and supported. The shells, both above and below, which to an inattentive observer seem only each a single piece, are in reality bound together at the edges by very strong and hard ligaments, preserving some small share of motion. At the opposite edges of this vaulted body, there are two holes: one for a very small head, shoulders, and arms, to peep through; the other, for the feet and the tail. From these shells the animal is never disengaged; and, as the head, tail, and legs, can be almost wholly concealed at pleasure, they afford it, in general, a secure defence, against every species

of

of destroyer, except that which is self-named human.

The Land Tortoise, from it's habits, making most use of it's feet in walking, is much nimbler on land than the Sea Turtle. The Tortoise, when thrown on it's back, by rocking and balancing it's body like the motion of an infant rocked in a cradle, at length turns itself again on it's belly; but the Turtle, once turned, remains without the power of recovering itself, or ever moving from the spot. It is remarkable that the brain of the Tortoise, though small, is three times as large as that of the Turtle; yet the latter animal has been known to weigh more than eight hundred weight, while the former is only, in general, from a single foot to five feet in length, measuring from the end of the snout to the extremity of the tail, and from five inches to a foot and a half across the back.

The Tortoise lives chiefly in holes dug in the mountains, or near marshy lakes. It has a small head, somewhat resembling that of a serpent; the eye is without any upper lid, the under

under lid serving to cover and preserve that organ; and, instead of teeth, it has only two bony ridges hard and serrated, which serve to gather and grind it's food. Such is the amazing strength of the jaws, that it is impossible to open them when they have once fastened: even though the head be cut off, they still keep their hold; and the muscles, in death itself, preserve a tenacious rigidity.

This animal, therefore, though of a peaceable nature, and subsisting almost wholly on vegetables, is by no means ill equipped for war; more especially as it seems endued almost with immortality. Goldsmith says, "nothing can kill it;" but he was a poet, and must not be understood literally. He adds, "the depriving it of one of it's members is but a slight injury: it will live, though deprived of the brain; it will live, though deprived of it's head."

Rhedi, in practising some experiments on vital motion, made a large opening in the skull of a Tortoise, washed the cavity so as not to leave the minutest part remaining, and then set the animal at liberty, which walked away

away without seeming to have received the smallest injury; except that, indeed, the animal shut it's eyes, and never—he finds it necessary to add—again opened them! The hole was soon afterwards seen to close; and, in three days, there was a compleat skin covering the wound. In this manner, for six months, the Tortoise lived without any brain; walking about with apparent unconcern, and moving it's limbs as before the cruel operation. But the Italian philosopher had the barbarity to push still farther his experiments. In short, he cut off the head; which, for more than a quarter of an hour, continued to rattle the jaws like a pair of castanets, and the animal, even then, survived twenty-three days. Of it's sufferings, what conception can be formed, when we consider that they were sufficient to destroy a creature capable of bearing so much!

Such is the longevity of the Tortoise, that it is known commonly to live more than eighty years: and there was one kept in the garden of the archiepiscopal palace at Lambeth, which was remembered above a hundred and seventy.

seventy. This animal was at last killed by the severity of a frost, from which it had not sufficiently defended itself in it's usual winter retreat, a heap of sand at the bottom of the garden.

From the smallness of it's brain, and the slowness of it's motion, it obviously appears to be a torpid, heavy animal, requiring rest and sleep. In fact, it reposes during the winter; and, at that season, when it's food is no longer found in plenty, happily becomes insensible to the want. It sometimes buries itself two or three feet in the earth, having first providently stored it's hole with moss, grass, and leaves.

Like the bat, mole, serpent, and lizard, it is awakened from it's dormant state by the genial return of spring; and, in a few weeks, begins to transmit it's posterity, when the procreative act is said to continue near a month. The eggs are contained in the ovary, above the bladder, which is extremely large; and before their exclusion, they are round and naked, with some red spots. When they are laid, however, they have an oval form, being smaller

smaller and longer than those of the domestic hen. Swammerdam, on comparing the size of the eggs, with the diameter of the passage through which they are protruded, was of opinion that the bones separated for the purpose, and again closed: but it seems more probable that the eggs give way on the occasion. All the eggs have a yolk and a white; but the shell is like those soft eggs which hens occasionally drop before their time. The shell, however, is much thicker, as well as stronger, and is longer coming to maturity prior to it's exclusion.

Though the Turtle is well known to lay from a hundred and fifty to two hundred eggs in a season, the Tortoise, from the scarceness of the animal, is supposed not to produce any great number. The female, when ready to lay, scratches a slight cavity in the earth, generally in a sunny situation; there depositing her eggs, and covering them with grass and leaves, she abandons them to be hatched by the warmth of the season. The young generally appear in about twenty-six days; and they no sooner quit the eggs, than they seek

their

their food untaught. The shell, with which they are from the first covered, expands and grows larger with age; being composed of a variety of pieces, all capable of extension at their sutures, so that the shell admits of increase in every direction. Thus the covering of the Tortoise grows larger, as the internal parts expand; resembling, in some measure, the growth of the human skull, which is composed of a number of bones, increasing in size proportionably to the quantity of brain.

Though the Tortoise, in a domestic state, will eat almost any thing, it prefers fruits, leaves, corn, bran, or grass; and is said seldom to prey even on snails, worms, or insects, except when other food is scarce. It is, however, kept frequently in gardens, for the express purpose of devouring these animals; and, in warm climates, is reputed to be a great destroyer of bugs. It is by no means uncommon for children to get on the back of a Tortoise; and, such is it's strength, that it never seems overloaded, but moves off with it's burden to where it expects to be fed, though it can seldom be induced to proceed farther.

The

The African Tortoise, which is the figure we have delineated, was kept many years in the garden belonging to the College of Physicians, London.

It is the Testudo Pusilla of Linnæus, and was imported from Santa Cruz, in West Barbary.

This species is thus accurately described by the ingenious Edwards—

The irides are of a reddish hazel-colour; the lips are hard and corneous; the head is covered with yellowish scales; the neck, hinder legs, and tail, are covered with a flexible skin of a dull flesh-colour; and the fore legs, which are partly exposed when the head is drawn in, have yellow scales on their outsides. The shell is round, pretty prominent on the upper side, and flat underneath: it is divided into many compartments, or separate scales, with furrows or creases all round, lessening one within another to the middle of each scale. The shell is of a yellowish colour, clouded with large and small irregular dusky

or

or black spots. There are five claws on each foot forwards, but four only on each of the hinder feet.

When this creature is apprehensive of any danger, it draws it's head, tail, and legs, into the shell; a quality which it possesses in common with the rest of the genus.

It is somewhat singular that, though the Land Tortoises, among moderns, engross the appellation of Tortoise, to the exclusion of the various kinds of Sea Tortoise, which are denominated Turtle, the Hawksbill species of this latter class are the animals which supply the Tortoiseshell, as it is still called, that is manufactured into such a variety of useful and curious articles.

BRITISH MUSEUM
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DODO.

Published Sept.r 1. 1798. by Harrison, Cluse & Co. No.8. Fleet St.

# DODO.

THE Dodo, or Struthio Cucullatus, in the Linnæan system, comprehends a genus of birds including three species; the Hooded, the Solitary, and the Nazarene. They are all natives of the Isle of France, and Bourbon, where they are called Drontes. The Dutch name them Dodaers, and the Portuguese, as well as the English, Dodos. Among naturalists, they have obtained such a great variety of names, that Buffon, remarking how little advantage can be gained by giving the same animal a different appellation in each language, insists that the real effect of the multitude of synonyms, is to produce embarrassment and confusion. "Do not multiply existences," he adds, was once the maxim of philosophers; but, at present, we have constantly reason to remind naturalists, not to multiply names without necessity.

The first Dutch who saw the Dodo in the island of Mauritius, now the Isle of France, named

named it Walgh-Vogel, or the Disgusting Bird; both on account of it's ugly figure, and the rankness of it's smell: ihe flesh, however, is said to be good and wholesome food. It is remarkable, that the Portuguese first called this island, Ilha do Cirne, or the Island of Swans; probably, because of the many Dodos which they had seen, and which they had mistaken for swans. Indeed, Ray, Willughby, and other eminent naturalists, have called it Cygnus Cucullatus; the Capuchined Swan. Naturalists are by no means agreed to consider the beautiful bird of Nazareth as a Dodo, and some have even disclaimed it's affinity to the Solitary, or Hermit.

The Dodo, as the Hooded Dodo is simply denominated, seems clogged by it's unwieldy carcase, which it can hardly collect strength enough to drag along. It consists, we may philosophically say, of brute passive matter, where the living organic particles are too sparingly disseminated. It has wings, but they are too short and feeble to raise it from the ground; it has a tail, but it is disproportioned, and out of place. We might, observes Buffon,

fon, take it for a tortoise disguised in the cloathing of the winged tribe. It's proportions, and it's movements, in short, give an idea of the most heavy and aukward of organized beings; and it appears, among the feathered tribes, what the sloth does among qradrupeds, an unresisting creature, alike incapable of flight or defence.

The body is not only bulky, but almost cubical, supported with difficulty on two exceeding thick and short pillars, and carrying a head so strangely shaped, that it might be taken for the whim of a caricature painter. This head rests on a huge swelling neck, and is composed of two great chaps, or mandibles, opening far beyond the eyes, which are large, black and prominent; so that the animal, in gaping, exhibits a most enormous mouth. The bill, consequently, is of an extraordinary length; and it is also thick, as well as sharp at the end, having the appearance of two pointed spoons laid on each other with their convexities turned outward. From this combination, there results a stupid and voracious physiognomy; and, to finish the deformity, a bordering

of

of feathers round the root of the bill, arches the face somewhat like a cowl or hood. The upper mandible is blackish throughout, except at the hook, where there is a red spot; the holes of the nostrils are placed very near it's middle, and close to the two transverse folds which rise at this part on the surface. The feathers of the Dodo are in general very soft, and their predominating colour is grey: deeper on the upper part of the body, but brighter on the stomach, belly, and entire under part. There is some yellow, as well as white, on the quill feathers of the wings; and also on those of the tail, which appear frizzled, and are few in number. The feet and toes are yellow, and the nails black. Each foot has four toes; three placed before, and one behind, the hinder having the largest nail.

The large stone, pretended to be always found lodged in the stomach of the Dodo, and to which has been ascribed the same origin, and the same virtues, as to the Bezoars, Clusius is of opinion, after an examination of two very different ones, is merely swallowed by the bird, like the granivorous class, and not formed in it's stomach.

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HONEY FLOWER OF NEW SOUTH WALES.

Published Sept.r 1.1798. by Harrison, Cluse & Co. N.o 78. Fleet St.

# HONEY FLOWER OF NEW SOUTH WALES.

SUCH is the wonderful profusion of curious and beautiful plants in the fertile regions of New South Wales, that the spot first explored was immediately denominated Botany Bay; a name which, by the vulgar, is still frequently, but most absurdly, used as the appellation of the whole of that very extensive country.

Of these botanical productions, and other rare objects of natural history, by the friendship of a gentleman in an official department, who was for many years resident, we possess a very valuable collection of original drawings, executed with admirable accuracy and taste.

From the subject which we have at present selected, under the name of the Honey Flower of New South Wales, and which may be considered as a melliferous shrub, the natives are accustomed

accustomed to suck a most delicious honey; which is found as well in the calyx, as at the bottom of the seven crimson tubes composing this beautiful flower.

The Honey Flower is borne by a perennial shrub, which grows chiefly in a gravelly soil, and usually rises to about four feet in height; the flowers, which are pretty numerous, being about double the size represented in the annexed print.

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GREAT EARED MONKEY.

Published, Oct.r 1, 1798, by Harrison, Clause & Co. N.o 78, Fleet Stre

# GREAT-EARED MONKEY.

THE Great-Eared Monkey, or Simia Midas of Linnæus, is a species of Monkey chiefly remarkable for it's ears, which are large, erect, naked, and almost square.

Buffon calls it the Tamorin, as well as the Great-Eared Monkey; the former, according to Binet, being the name of this animal in Cayenne.

This beautiful little creature, which is only about the size of a squirrel, is very lively, and easily tamed; but it is so extremely delicate, that it cannot long sustain the inclemency of a northern climate. It inhabits the warmer regions of South America; and is also found in the Isle of Gorgona, south of Panama, in the South Sea.

The distinctive characters of this species, as described by Buffon, are as follows—

It

It has neither cheek pouches, nor callosities on the buttocks. The tail is flaccid, and twice the length of the body and head. The partition between the nostrils is very thick, and the apertures are placed at the sides. The face is of a dusky flesh-colour; the ears are square, large, naked, and of the same colour; the eyes are chesnut; and the upper lip is divided nearly like that of the hare. The head, body, and tail, are covered with soft blackish brown hair; and the hands and feet with short hair of an orange colour. The body and limbs are finely proportioned.

The female of this species is not subject to the menses: indeed, Buffon elsewhere remarks, it will generally be found, that the apes, baboons, and monkies, with naked buttocks, are alone subject to this evacuation.

Pennant says, that the hair on the forehead of the Great-Eared Monkey, is upright, and long; that on the body, soft but shaggy. The head, whole body, and upper part of the limbs, he also says, are black; except the lower part of the back, which is tinged with yellow.

low. The tail too, is black; the teeth are very white; and the nails are long and crooked.

Binet describes the animal as black, with yellowish spots on the shoulders. It has, he says, the head and face of a lion; with small teeth as white as ivory, and arranged with great symmetry; and is very familiar and playsome.

Dampier, speaking of this species, says that, "at low water they come to the sea-side, to feed on muscles and periwinkles, which they dig out of the shells with their claws."

From the impracticability of it's long surviving the cold of our northern clime, the Great-Eared Monkey is seldom seen alive in Europe, where it's peculiar habits are not at all known. It appears, however, from the little which is to be collected, in perusing the works of travellers and naturalists, that it is of a nature both active and docile; and, in more respects than in size, it reminds us almost as much of the squirrel as of the monkey tribes,

tribes, though it's tail is not garnished with long hairs like that of the former animal.

Edwards calls it the Little Black Monkey; but we have preferred the more common name of the Great-Eared Monkey, as better corresponding with the idea which certainly gave rise to the Linnæan appellation; and which, in fact, forms it's chief characteristic distinction.

It is remarkable, however, that Goldsmith, who classes the Great-Eared Monkey among the Sagoins of the new continent, or monkeys with feeble tails, incapable of holding the animal in a hanging position, takes not the smallest notice of it's ears; and barely mentions, that "it is usually black, with the feet yellow: some, however," he adds, "are found all over brown, spotted with yellow." This is all the account he gives us of the animal; and, by mistake, as it should seem, for he probably meant to give the native name from Buffon, he calls it the Tamaim, instead of the Tamarin.

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# GREEN-WINGED DOVE.

TO a poetical mind, not conversant with the systematic arrangements of nature, it must be no small mortification to find, on perusing the works of some of the most able naturalists, that the Dove, that great favourite of every child of Fancy—whose very name is as favourable to verse, as analogous to love, the supreme topic—is now rarely noticed; at least under it's original appellation.

Linnæus, the great master of the art of arranging nature, describes under the word Columbæ, which is literally Pigeons, all the Doves, as they have been commonly denominated, as well as all the different classes of Pigeons; and his plan seems adopted by Pennant, Latham, and others.

Buffon, with an almost equal disregard of poetical feelings, recognizes them, it is true, as distinct from the Pigeon, but he calls them Turtles; a name to which, as Englishmen, we should beg leave to object, where it only from the circumstance of it's being the same word as that which distinguishes the famous amphibious animal, whose luscious green fat

so contributes to the obesity of our Epicurean countrymen.

Anciently, we incline to believe, the whole genus were, in England, confined to three classes, and all denominated Doves: the Stock Dove, the Ring Dove, and the Turtle Dove. From these, domesticated, and occasionally breeding together, added to what have been brought from other countries, with their subsequent intermixtures, have originated, as it should seem, all the various families of those birds, commonly called Pigeons, which are now found in Great Britain.

In support of our favourite name, as it applies to the Ring Dove, for example, we may adduce the Dutch Ring Duve; the Flemish Kriess Duve: the Swedish Ring Dufwa; and the Danish Ringel Due.

We may also remark that, though the word Pigeon appears to be universally adopted for all the birds of this genus, when living in a domesticated state, the place in which they are kept is far more frequently called a Dove-Cot, or Dove-House, than a Pigeon-House.

Nor,

Nor, after all, though we frequently find the Stock Dove, converted into Stock Pigeon, and the Ring Dove sometimes into Ring Pigeon, do we ever remember to have seen the Turtle Dove called a Turtle Pigeon, by any naturalist whatever. Buffon, however, droping the word Dove, calls it simply the Turtle, or Common Turtle; against which we have already entered a protest.

To oppose our opinion against the great names which have been quoted, would certainly be presumptuous. But, as enquiry is open to all, and every author is free to offer his sentiments, which every reader is equally as free either to adopt or to reject, we see no reason for restraining the impulse which we feel to enlarge a little, in behalf of an acknowledged favourite, whom we do not wish to have entirely banished from our groves.

Though the amiable poet, Goldsmith, in his History of the Earth and Animated Nature, speaks of Doves under the general name of Pigeons, and seems inclined, like other naturalists, to abandon them, we can trace, as we

we apprehend, in his descriptions alone, sufficient to support us in the notion, that there subsists a natural distinction between the Dove and the Pigeon families; notwithstanding we are ready to concede, that the blended progenies, in general, may be considered as Pigeons, rather than Doves.

We shall present, from Goldsmith, a few extracts, in his own words—

"The fidelity of the Turtle Dove is proverbial, and makes the usual comparison of such poets as are content to repeat what others have said before them; but the Pigeon of the Dove-House is not so faithful; and, having been subjected to man, it puts on licentiousness, among it's other domestic habits.

"So great is the produce of the Pigeon, in it's domestic state, that near fifteen thousand may, in the space of four years, be produced from a single pair: but the Stock Dove seldom breeds above twice a year; for, when the winter months come, the whole employment of the fond couple is rather for self-preservation, than transmitting a posterity. They seem,

seem, however, to have a stronger attachment to their young, than those who are found to breed so often; whether it be that instinct acts more powerfully upon them in their state of nature, or that their affections are less divided by the multiplicity of claims.

"There are many species of the Wild Pigeon which, though bearing a strong affinity to the Stock Dove, are nevertheless sufficiently different from it to deserve a distinct description. The Ring Dove is of this number; a good deal larger than the former, and building it's nest with a few dry sticks in the boughs of trees. This seems a bird much fonder of it's native freedom than the former, and attempts have been frequently made to render it domestic, but they have hitherto proved fruitless; for, though their eggs have been hatched by the tame pigeon in a Dove-House, yet, as soon as they could fly, they always betook themselves to the woods where they were first produced.

"The Turtle-Dove is a smaller but a much shyer bird than any of the former. It may easily be distinguished from the rest by the iris of the eye, which is of a fine yellow, and by a beautiful

a beautiful crimson circle that encompasses the eye-lids. The fidelity of these birds is noted; and a pair being put in a cage, if one dies the other will not survive it. The Turtle Dove is a bird of passage; and few, or none, remain in our northern climates in winter. They fly in flocks, when they come to breed here in summer; and delight in open, mountainous, sandy countries. But they build their nests in the midst of woods, and chuse the most retired situations for incubation."

To these extracts, which clearly acknowledge a sufficient difference between the Pigeon and the Dove, to constitute distinct species; we may add the remark of Buffon, who expressly says, "the various and even opposite habits shew, that under the Pigeon are included many different species."

That the Doves, as well as Pigeons, of every known description, wherever they could be procured by the breeders of Pigeons, have been induced, as much as possible, to corrupt the purity of their original nature by human artifice, so as to form unions which, in their original state, would never have taken place, cannot

cannot well be doubted; and, from such intercourse, added to the many natural varieties, local and accidental, have arisen the very numerous tribes of Pigeons now known in Europe. But still, as in the above descriptions of Goldsmith, by a discerning eye, the genuine Dove, with it's amiable and affectionate habits, may easily be recognized, as a distinct bird from the Pigeon.

Even from the predominant hues of their feathers alone, little as feathers are to be relied on in discriminating birds, an idea may sometimes be formed: the beautiful brown which takes it's name from the Dove is well known, and there is a blue almost equally characteristic of the Pigeon; varied as both almost constantly are with other colours.

Among the various species of the Dove, there are few more beautiful than that which we have figured from Edwards; and which that accurate and judicious naturalist has denominated the Green-Winged Dove.

The bill of this bird, which is a native of the East Indies, is nearly an inch long; it is of a scarlet

scarlet colour from the point to the nostrils, and of a pale blue from the nostrils to the head. The eyes are darkish; and, from the forehead, which is white, proceed two lines of the same colour, above the eyes, towards the hinder part of the head. The crown of the head is blueish; the sides of the head, the neck, and the breast, are rosaceous; and the belly is of a dirty orange hue, which insensibly blends itself with the rose colour of the breast. The upper sides of the wings, when viewed in certain lights, display a beautiful green; and, in others, assume the tinge of bright copper, or gold. The larger quills are a dirty black; and the shoulders or ridges of the wings are of the same colour with the belly. The covert feathers are a dark cinnamon; the interior webs of the quills being in some parts tinged with a common cinnamon, but in others with a dusky black. The middle of the back is a dirty brown; and the lower part of the back, and the feathers which cover the tail, are cinereous. The middle feathers of the tail are black; and the outer ones cinereous, with black tips. The legs and feet are reddish, and the claws are a light brown.

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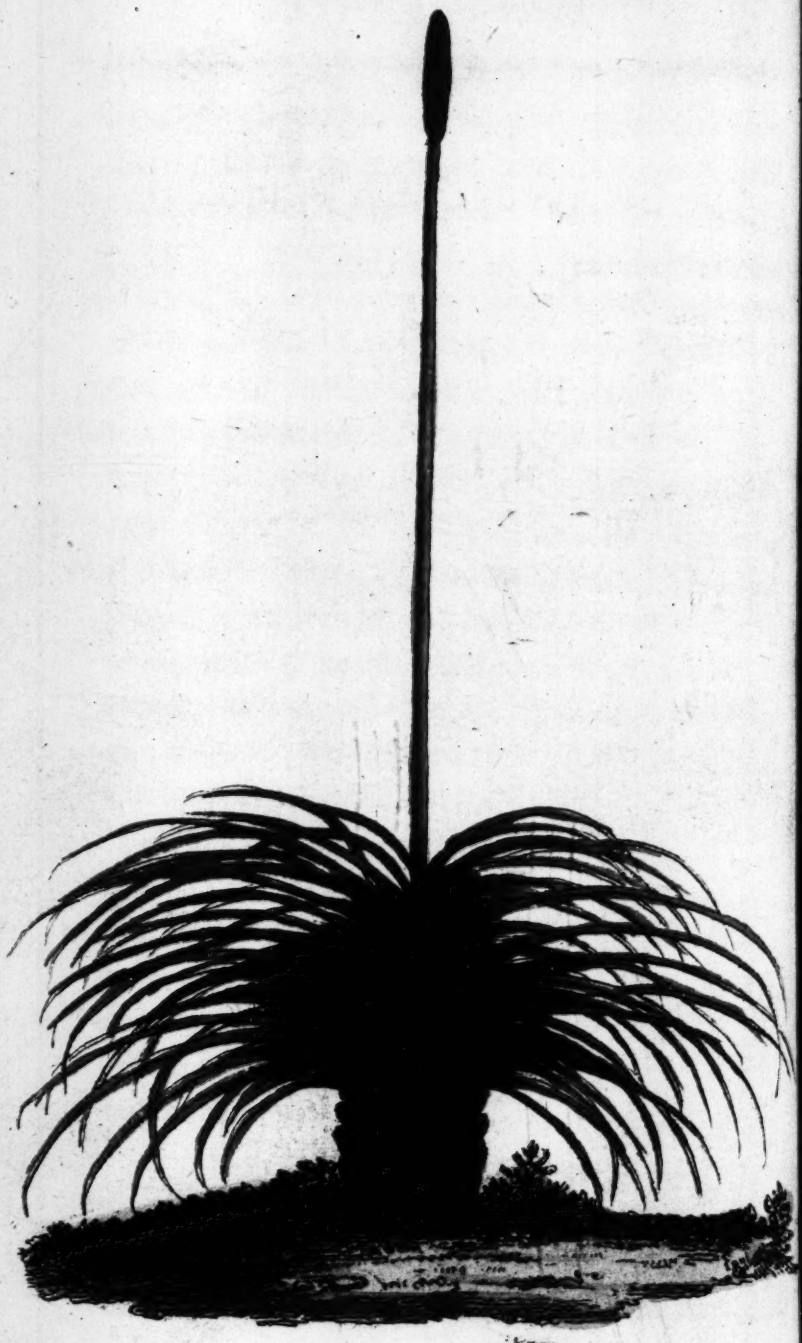
MAY



GRASS GUM TREE.

Published Oct.r 1.1798 by Harrison Gosse & Co. N.o 8 Flat St.

# GRASS GUM TREE.

THIS curious tree is found in great perfection on the barren tract of land which lays between Port Jackson and Botany Bay. It's height is various; being in some five feet, in others not more than two, from the ground. The outside, or bark, invariable appears black, and as if it had been burnt to a cinder.

From the sides exudes a yellow gum; which, being drawn out by the heat of the sun, falls to the ground, and is commonly found buried in large lumps in the sand.

This gum, when dissolved in spirits and water, makes a pleasant beverage. The natives are seldom without it; kneading it into a paste, with which they stop holes in their canoes, and secure the joints of their spears and fiz-gigs.

From the head of this tree proceeds a quantity of long, coarse grass, of which they make torches;

torches; and, from the centre, there grows a long stem, or bull-rush, ten or eleven feet in length, which those people sometimes use in making their spears and fiz-gigs; but it is not tough, being very full of pith.

At the flowering season, six or eight inches of the upper part is covered with a quantity of small pale yellow flowers, full of honey. The seeds, which are inclosed in hard, prickly vessels inserted in the rush itself, are food only for parrots and cockatoos.

Large disgusting grubs, or worms, are often found in the body of the tree, of which the natives are very fond.

The medicinal qualities of this Gum, which is the Resin Acaroides of the last London Dispensary, are not unknown in England. It is of an astringent nature, and is said to have been given with some success in consumptive cases. It is a gum resin, slightly fragrant, and it's scarcely perceptible taste inclines to sweetness.

This

## GRASS GUM TREE.

This curious and beautiful tree is sometimes called the Gum Rush; and, at others, the Yellow Gum Tree; by the European inhabitants of New South Wales.

It has been introduced among the scenery of one of the beautiful views in the very interesting accouut and description of New South Wales, recently published by David Collins, Esq. Judge Advocate of that flourishing settlement.

With this single exception, however, the Grass Gum Tree, we believe, has never been before engraved.

GOAT.

Published Nov.r 1.1798 by Harrison Clarke & Co. N.o 78. Fleet Stre

# GOAT.

THE Goat, or Capra Hircus, in the Linnæan system of zoology, forms a distinct genus, of the order of Pecora; the distinguishing characters of which are, that the horns are hollow, turned upwards, and annulated on their surfaces—that there are eight cutting teeth in the lower jaw, but none in the upper—and, that the male generally has a beard.

The Goat, which some naturalists consider as differing very little from the sheep, seems in fact still farther removed from that animal than the ass from the horse. The Buck Goat, Buffon remarks, as willingly copulates with the ewe, as the jack-ass with the mare; and the ram unites with the She-Goat in the same manner as the stallion with the she-ass. But though these commixtures are frequent, and sometimes prolific, no intermediate species has been formed between the Goat and the sheep. The two species are distinct, and still remain at the same distance from each other. No real

real change has been effected by these mixtures; they have given rise to no new or middle race of animals. They have only produced individual differences; which have not the smallest influence on the unity of each primitive species, but confirm, on the contrary, the reality of their characteristic and essential distinction.

Though there are many animals which resemble the Goat, as well as the sheep, in speaking of them generally, we confine ourselves to the domestic kinds. Whether the foreign kinds could intermix with our common species, or not, is unknown: we are, therefore, warranted in considering them as distinct species, till sufficient evidence is obtained, that they not only procreate together, but produce fertile individuals; since this is the only character, according to Buffon, which constitutes the reality of what is called species, both in the animal and vegetable kingdoms

The Goat is one of those domestic animals, the value of which is overlooked, because so far

far exceeded by that of the sheep; it is thus that the ass, whose place is supplied by the horse, is considered as of little consequence. Were the horse or sheep removed from nature, the ass and the goat would be invaluable, and the same arts would immediately be put in practice to cultivate and improve their kinds, as the higher orders of useful animals now generally experience. In their present neglected ſtate, though domesticated in some degree, they vary little from the wild animals of the same kind; man has left them their primitive habits and forms: and, little indebted to his assiduity, they have the greater obligations to nature.

In sentiment and dexterity, the Goat is vastly superior to the sheep. It approaches man spontaneously, is easily familiarized, sensible of caresses, and capable of attachment in a very considerable degree. It is stronger, lighter, has more agility, and is less timid, than the sheep. Sprightly, capricious, vagrant, and lascivious, it is with difficulty confined to a flock. It loves to retire into solitude; to climb steep and rugged places; to stand,

stand, and even to sleep, on the points of rocks or cliffs overhanging the sea, and at the edges of the most tremendous and terrific precipices. It's fondness for climbing, and traversing dangerous heights, seems to have been assisted by nature in the formation of it's hoofs; which are cloven, hollow underneath, and have sharp edges: thus, it walks with as much facility on the ridge of a house as on level ground. When two Goats are yoked together, which is not uncommon in countries where they most abound, they will, as if by consent, take the most hazardous leaps: and so well do they time their mutual efforts, that they very rarely miscarry in these joint attempts.

The Goat being hardy, and easily sustained, falls chiefly to the lot of the poor, who want pasture for the supply of more delicate animals. It prefers neglected wilds to all the cultivated fields of art; browzes on the heathy mountains, or shrubby rocks; is fond of the tops of the boughs, or tender bark, of young trees; and, eating almost every herb, is injured by a very inconsiderable number. It bears intense heat far better that the sheep, and is neither

neither terrified at a storm, nor apparently incommoded by rain; seeming to be only affected by immoderate cold, which produces the vertigo, a disease often fatal to this animal.

The inconstancy of the Goat's disposition is marked by the irregularity of it's actions. It goes forward, stops short, runs, leaps, approaches, retires, conceals itself, returns, and flies off, as if merely actuated by caprice, without any other cause than what arises from an excentric vivacity; so that the suppleness of it's organs, and the strength and nervousness of it's frame, are scarcely sufficient to support the petulance and rapidity of it's natural movements.

The Goat commonly brings forth but a single kid. In warm climates, however, though this animal degenerates, and becomes smaller, it is more fruitful, very frequently producing three or four kids at a time. The buck is capable of procreating at the age of twelve months, and the female at that of seven: but the fruits of these premature embraces are feeble and defective;

defective; and, in a domestic state, they are as much as possible restrained till about eighteen months.

The colour of these animals varies extremely; and the hair is in some long and rough, but in others smooth and short. The He-Goat is a beautiful, vigorous, and ardent animal; and, in the course of two or three months, sufficient to impregnate a hundred and fifty females. But this ardour, which brings on a speedy decay, continues only three or four years; and, at the age of five or six, he becomes old and enervated. The female continues fertile till seven. She is in season during the months of September, October, and November; but, if allowed to approach the male, willingly receives him, and is capable of producing, at all times of the year. She holds, however, much surer in autumn; and the months of October and November are preferred, because the young kids are brought forth when the herbage is tender. The period of gestation is full five months; the kids being delivered in the beginning of the sixth. They suck only a month or six weeks.

The

The milk of the Goat is sweet, nutritive, and medicinal: it is less liable to coagulate on the stomach, than that of the cow; and, therefore, much preferable, where the digestion is weak. The peculiarity of this animal's food, communicates to the milk a flavour different from that of the sheep or cow, which renders it very grateful to those who are fond of this aliment.

In several parts of Ireland, as well as Wales, and the Highlands of Scotland, Goats constitute the chief possessions of the humble natives. On mountains where no other animal could subsist, the Goat gleans a sufficient maintenance, and supplies the hardy inhabitants with a varied luxury. Their beds, composed of Goat skins, are soft, clean, and wholesome; and they regale on the milk, which they also make into butter and cheese. The Kid, even by civic epicures, is considered as a dainty; and, notwithstanding the strong odour of the He-Goat, which proceeds only from the hide, even his flesh, when the animal has been properly fattened, is by some preferred to venison. The flesh of the Goat, however,

however, except in warm climates, where mutton is always ill tasted, must certainly be considered, on the whole, as very inferior to that of the sheep; and, were it only for the injury which the Goat does to young plantations, by it's cropping the tender boughs, and destroying the bark of young trees, it will hardly ever be in any great degree drawn from it's beloved rocks and mountains, in the cultivated countries of Europe. Yet, on various occasions, this animal contributes to the necessities of human life. It's hair, and skin, are used in several manufactures; it's horns are made into the hafts of various instruments; and it's tallow is superior to that of the sheep or ox. The value of the flesh, and milk, are well known; the latter, in consumptive habits being esteemed an excellent succedaneum for asses milk, and by some it is even preferred. In many of the mountainous parts of Ireland and Scotland, as well as in Wales, this milk, turned into whey, has been found surprisingly efficacious, by convalescents, where coolers and restoratives were necessary. To several of those places, during the proper season, such patients generally resort; and,

from

from the combined aids of this salutary and innocent beverage, pure air, and exercise, they frequently experience a return of health, and a renovation of constitution, after all other expedients have proved abortive.

The age of the Goat is indicated by the teeth, and the knobs of the horns. The number of teeth in the She-Goat is not uniform; they are generally fewer than those of the male, whose hair is also more rude, and his beard and horns are longer. Their excessive venery is a bar to their longevity, for they seldom live beyond their twelfth year. Both males and females, with very few exceptions, are furnished with horns. White Goats, however, without horns, are said to give most milk, and black Goats are esteemed the strongest. The mottled ones are certainly the most beautiful.

The Goat, like the ox and sheep, has four stomachs, and chews the cud. It's species is more generally diffused than that of the sheep; Goats, every way similar to our own, being found in many parts of the world. They are only

only smaller in Guinea, and other warm climates, and larger in Muscovy, and other northern regions. The Goat, however, was not a native of the new world, having been introduced there by the original discoverers: the Americans, indeed, were unacquainted with all our domestic animals; such as, Goats, sheep, hogs, cows, and horses. The increase of these creatures in every part of that continent, especially it's southern division, is really prodigious: but, in the rigorous climate of Canada, the Goat is too delicate to perpetuate it's race; so that new supplies are obliged to be annually imported, in order to prevent it's extinction.

Pontoppidon, in his Natural History of Norway, informs us that, from the port of Bergen alone, so numerous are Goats in that country, eighty thousand raw hides are annually exported.

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BROWN & ASH-COLOURED CRANE.

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# BROWN AND ASH-COLOURED CRANE.

THIS beautiful Crane, the Ardea Canadensis of Linnæus, is by Buffon called simply the Brown Crane, and described as about a third smaller than the Whooping Crane.

From the accurate Edwards, to whom we are indebted for the figure, we learn that the bill of this bird is four inches long; and that the wings, when closed, are eighteen inches. The leg bone from the knee to the foot, is seven inches long; and the middle toe is above three inches. The bill, which is formed like that of the Whooping Crane, is of a dusky colour; except the point of the lower chap, which is of light flesh colour. The top of the head, from the bill to the ear-holes, is covered with a reddish skin, thinly beset with black hairs; but the sides of the head beneath the eyes, and the inferior side of the throat, are white. The hinder parts of the head and neck all round are cinereous, and gradually become

become brown at the rise of the breast. The beginning of the back, and the covert feathers of the wings, are of a light reddish brown, with tips of a darker hue. The greater quills are a blackish brown, with white shafts; and those which fall next the back are brown, their points extending beyond the prime quills when the wings are closed. The tail is of a brownish ash-colour, and the breast changes from brown to cinereous, which colour reaches to the covert-feathers of the tail, where they are whitish. The lower part of the back, the rump, and the upper coverts of the tail, are of a light ash; and the legs, feet, and claws, are entirely black, the former being bare above the knees.

These differences, Buffon observes, and that of the size, which in this family of birds varies much, are not sufficient to separate this species from that of the European Crane. They are, at least, two kindred species; especially, as their habits, and the climates where they exist, are similar. They usually advance into the north, as far even as Hudson's Bay, where they breed; but, on the approach of winter

winter, again return towards the south, holding their course, as it should seem, through the country of the Illinois, and of the Hurons, and pushing onwards to Mexico, or even farther. These American Cranes, therefore, have the same instinct as those of Europe: they travel, also, from north to south; and this is, probably, what the Indian meant, who told Catesby that they retired from the sea to the mountains.

The Brown and Ash-Coloured Crane advances from Mexico to the northern parts of the continent early in the spring. It appears in Hudson's Bay about the month of May; where it frequents the lakes and pools during the summer, and retires again in autumn.

This bird is easy to be recognised in the Toquilcoyod of Fernandez, as thus described—

"To the Crane a species may be referred, which is of the same size, and has similar habits and instincts; it is called Toquilcoyod, in imitation of it's cry: it's whole body is brown,

brown, mixed with black and cinereous; it's head is decorated above with a scarlet spot."

This North American Crane, which emigrates from the regions of the south, Brisson has made his eighth species, under the name of the Mexican Crane; and which Willughby, Klein, and Ray, have termed the Grus Indica.

The Brown and Ash-Coloured Crane, as figured and described by Edwards, that ingenious naturalist remarks, was first brought from Hudson's Bay; to which place it resorts in the summer season.

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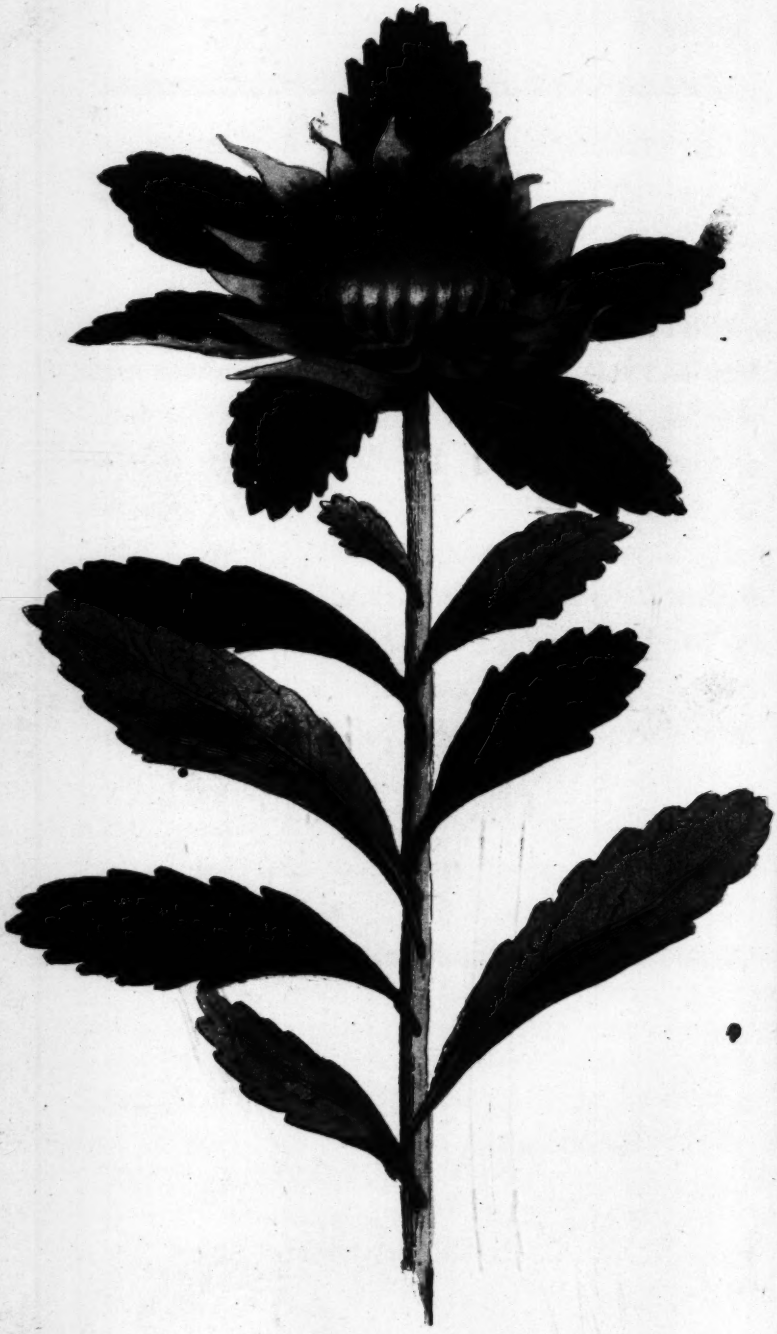

WAR·RE·TAW.

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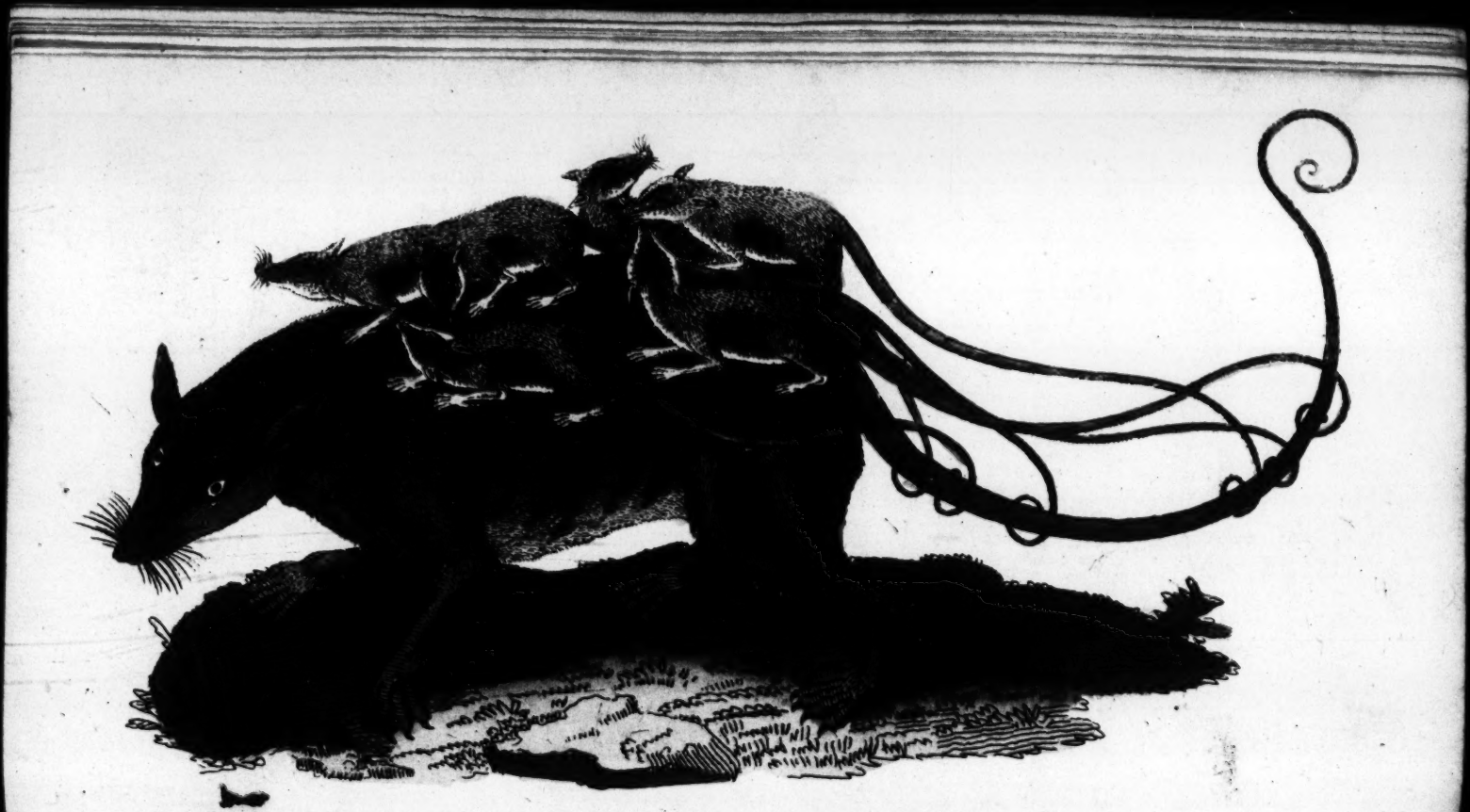
# WAR-RE-TAW.

THIS grand and beautiful flower has been named by Dr. Shaw, and Dr. Smith, in their Zoology and Botany of New Holland, the Embothrium Speciocissimum, or Great Embothrium or Warretah. The most intelligent residents in New South Wales, however, call it the War-re-taw, as better according with the pronunciation of the natives. It is for this reason that we, too, have preferred the compound word.

The War-re-taw, which is usually found to flourish best in a gravelly soil, grows frequently from six to seven feet in height. It bears honey in the petals, and is universally deemed the most superb flower of New South Wales.

It is remarkable, that the flowers of New South Wales, in general, are melliferous, but that very few of them are odoriferous.



GREAT WOOD MOUSE OF AMERICA.

# GREAT WOOD MOUSE OF AMERICA.

FROM the curious manner in which this animal is seen to carry it's young—conveying them on it's back, with their respective tails all encircling it's own—we are not a little surprised to find it noticed by so few modern naturalists.

Buchoz, however, in his celebrated Dons Merveilleux de la Nature, has furnished us with the annexed figure, which we consider as too interesting to be neglected in a professed collection of the Curiosities of Nature.

But, though Buchoz calls it the Surinam Rat, we are not inclined to follow him in that appellation. The Philander, or Phalanger, has by some naturalists been erroneously denominated the Rat of Surinam, which is an undoubted Opossum; and these writers have been much censured for so egregiously mistaking an animal decidedly different from every species

species of the Rat. The fact is, that Rats, of various descriptions, prodigiously abound in Surinam; and, from a late account of that place, it appears that they literally over-run not only the country, but the inhabitants, over whom these disagreeable intruders are perpetually passing as they lay in bed.

The Great Wood Mouse of America is certainly not among the number of these unwelcome visitors; though we incline to believe it a native of Surinam, as well as of other southern regions of America. But it's abode is chiefly in the woods: and we suspect that the Mus Sylvestris, or Wood Mouse, of Brisson, may be this animal; and not, as has been supposed, the common Brown Rat, or Surmulot of Buffon.

Brookes, who calls the subject of our enquiry the American Wood Rat, describes it as nearly the size and shape of a common Rat. It has, he says, shining eyes, and stiff ears, without hair. On the upper lip there is a long beard, and over each eye are two long

hairs

hairs like hogs bristles. The tail is naked, and curls at the end; and that of the male is spotted with a deep red bay colour. The upper part of the body is reddish; but the belly, feet, muzzle, and forehead, are of a whitish yellow, except round the eyes, where it is of a deep brown. All the nails on the fore feet, and those on the great toes of the hind feet, are blunt and short, but the rest are sharp. The feet are like those of a monkey, and it carries it's young on it's back. Some, he adds, call it the Wood Dormouse.

In the above description, though by no means exactly according in every particular, it is impossible not to recognise the animal of Buchoz, which we have called the Great Wood Mouse of America; conceiving it rather a Mouse—if not, in reality, a large species of Dormouse—than a Rat, as we generally understand that word, of any denomination whatever.

It is not a little singular, that Buffon, in describing the common Brown Rat, or Surmulot, observes

observes that it sleeps not, like the Dormouse; but goes out in winter, especially when the weather is mild.

Why is this negative introduced, if he had not some presentiment that even his Surmulot might be suspected of an affinity, at least with the Dormouse?

BRITISH MUSEUM
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CASSOWARY OF NEW SOUTH WALES.

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# CASSOWARY,
## OF NEW SOUTH WALES.

"THE bird, of which the annexed engraving is a correct representation, was taken alive, and carried into the settlement at Port Jackson, about six months before the drawing of it was made; at which time, the subject appeared to be about eight or nine months old.

"In full grown birds, the colour of the feathers is much darker than in the young ones. They are very swift of foot, when pursued; and have been known to strike severely with the heel. When standing erect, they have actually measured full seven feet in height; and, from Mr. Collins's Account of the English Colony in New South Wales, lately published, it appears that a female, which had been killed, was found to contain exactly fifty eggs.

"The

"The eggs of this Cassowary, known by modern naturalists, under the general name of the Cassowary of New Holland, are not so large as those of the Ostrich. Their shape is nearly an oval, and their colour a bottle green.

"The nest is constructed principally of dried fern; and is formed on the ground, usually at the edge of a swamp. In one nest, eighteen eggs have been found; the weight of each being about three pounds. The flesh of the Cassowary of New South Wales is coarse; but it has often proved, to the writer of this sketch, when in that country, a welcome and delicious meal.

"A singularity is noticeable in the construction of the feathers, two quills proceeding from each shaft.

"The food of the Cassowary consists, chiefly, of the tops of flowering shrubs, rushes, and weeds. On dissecting it, the gizzard has been found extremely large: and the tongue

tongue is peculiar; being broad at the root, pointed at the tip, and jagged, or serrated, on each side.

"The natives name this bird Ma-ray-ong. That from which the drawing is made, soon grew exceedingly domestic; fed in common with fowls, &c. in the yard; and ran, whenever it heard itself called by it's owner."

To the above genuine and original particulars, for which we are indebted to an ingenious friend, may be added what has been said by the few writers on natural history who have yet noticed this beautiful bird.

Mr. Smellie, the very respectable translator of Buffon, remarks that "a new species of Cassowary has lately been discovered at Botany Bay, and termed the New Holland Cassowary. It is much larger than the former; being seven feet two inches long, while the other is only five feet and a half. It runs exceeding swiftly, and it's flesh is palatable food."

Latham

Latham thus characterises this Cassowary. "It is blackish; it's crown flat; it's body bristly; it's head and neck planted with quills; and it's legs serrated behind."

In Surgeon White's Journal of his Voyage to New South Wales, we are informed that, "on the 30th of February 1788"—it should, probably, have been the 2d of March—a New Holland Cassowary was brought into camp. This bird," he adds, "stands seven feet high, measuring from the ground to the upper part of the head; and, in every respect, is much larger than the common Cassowary of all authors, and differs so much therefrom, in it's form, as to clearly prove it a new species. The colour of the plumage is greatly similar, consisting of a mixture of dirty brown and grey; on the belly it was somewhat whiter; and the remarkable structure of the feathers, in having two quills, with their webs, arising out of one shaft, is seen in this as well as the common sort. It differs materially, in wanting the horny appendage on the top of the head. The head and beak are much more like

those

those of the ostrich, than the common Cassowary, both in shape and size. Upon the upper part of the head, too, the feathers, with which it is but thinly covered, are very small, looking more like hair than feathers. It farther differs, in having the neck pretty well clothed with these small feathers, except the chin and throat; which are so thinly covered, that the skin, which is there of a purplish colour, may be seen clearly. The small wings are exceedingly short; and form a ridiculous contrast with the body, as they are even less than those of the common Cassowary: they have no large quills in them, being only covered with the small feathers that grow all over the body. Another singularity also presents itself in this species, which is in respect to the legs. As to the back part of them, the whole length is indented, or sawed, in a remarkable manner. The toes are three in number; the middle one long, the other two short, with strong claws, not unlike the same part of the common species. On examining the viscera, they differed from every other species of the feathered kind which I had ever

seen;

seen; particularly, in having no gizzard, or second stomach; and the liver was so very small, that it did not exceed in size that of a blackbird. To this liver was joined a large gall-bladder, well distended with bile. The crop, or stomach, was filled with at least six or seven pounds of grass, flowers, and a few berries and seeds. The intestinal canal was at least six yards long, very wide, and of a regular cylindrical shape from the opening of the stomach to the vent. The heart and lungs were separated by a diaphragm or midriff, and bore a tolerable proportion to the size of the bird. The flesh of this bird was very good, and tasted not unlike young tender beef.

"This bird is supposed to be not uncommon in New Holland, as it has been frequently seen by our settlers, both at Botany Bay and Port Jackson; but is exceedingly shy, and runs faster than a greyhound. One of them, however, has been shot."

From that bird, Mr. White published his engraving of the New Holland Cassowary; and

and the original, being sent to England by the Governor, as a present to Lord Sidney, was deposited, through the medium of Sir Joseph Banks, in the collection of the late Mr. John Hunter.

Captain Tench, who also mentions this bird, in his Narrative of the Expedition to Botany Bay, calls it the Emu; a name by which it was very commonly known in New South Wales, though it certainly is a Cassowary, and not an Emu.

If we add that gentleman's account, which greatly corresponds with the preceding, though written first, the reader will, we believe, be in possession of all that has been published on the subject.

"The bird which principally claims attention, is a species of ostrich, approaching nearer to the Emu of South America, than any other we know of. One of them was shot, at a considerable distance, with a single ball, by a convict employed for that purpose by

by the governor: it's weight, when compleat, was seventy pounds; and it's length, from the end of the toe to the tip of the beak, seven feet two inches, though there was reason to believe it had not attained it's full growth.

"On dissection, many anatomical singularities were observed: the gall-bladder was remarkably large, the liver not bigger than that of a barn-door fowl; and, after the strictest search, no gizzard could be found. The legs, which were of a vast length, were covered with thick strong scales, plainly indicating the animal to be formed for living in desarts; and the foot differed from an ostrich's, by forming a triangle, instead of being cloven.

"Goldsmith, whose account of the Emu is the only one I can refer to, says, that "It is "covered from the back and rump with long "feathers, which fall backward, and cover "the anus; these feathers are grey on the "back, and white on the belly."

"The

"The wings are so small, as hardly to deserve the name, and are unfurnished with those beautiful ornaments which adorn the wings of the ostrich. All the feathers are extremely coarse, but the construction of them deserves notice; they grow in pairs from a single shaft, a singularity which the author I have quoted has omitted to remark.

"It may be presumed, that these birds are not very scarce, as several have been seen, some of them immensely large; but they are so wild, that our fleetest greyhounds are left far behind in every attempt to catch them. The flesh was eaten, and tasted like beef."

If Captain Tench had turned to the account of the Cassowary, instead of the Emu, he would have found that Goldsmith has noticed the double feathers springing from a single shaft. The Emu, as we have before suggested, is a different bird.

It is singular, that the gizzard should be described as wanting, in the first Cassowary which was shot in New South Wales, and that

that it should since have been found particularly large in this bird.

This remark we cannot avoid making, as we are persuaded of the truth of our friend's account; which expressly states, that "the gizzard has been found extremely large." Far be it from us, however, to insinuate, in the slightest degree, that Captain Tench, and Surgeon White, are not persons of equal veracity. Our friend's information seems to have been the result of farther and more minute enquiry: not confined to a single subject, as was at first necessarily the case; but sanctioned, and supported, in all probability, by repeated proofs, during a long residence, subsequent to the early accounts published by those ingenious gentlemen.

BRITISH MUSEUM
15 MAY 18

# CORALLINE SNAKE.

ON viewing the beautiful colours of the Coralline Snake, we almost lose the idea of horror which is attached to the representation of noxious animals in general. The rich lustre of the coralline red, banded at intervals with a delicate yellow, which is inclosed by a deep but brilliant blue, presents to the eye an assemblage so truly fascinating, that we incline to forget it is a serpent which we are contemplating.

It is called, by Goldsmith, the Coral Serpent; and he only informs us that it is red, and that it's bite is said to be fatal.

Of this fatality, however, we have some doubt; though Dr. Owen, in his Essay towards a Natural History of Serpents, certainly asserts that, in general, the red in serpents is a denotation of their malignity.

The Coralline Snake is unquestionably a native of South America; and a snake which greatly resembles it, only that the blue bands are said to be black, is mentioned by Captain Stedman, in his account of Surinam.

The

The Andes, or lofty mountains of Chili, in South America, which Antonio De Herrera, in his History of America, calls a prodigy of nature not to be matched in it's kind, consist of two chains of high mountains, about 1500 leagues in length, stretching along the Pacific Ocean, from the Isthmus of Darien, to the Straits of Magellan; and Chimborazo, the most elevated point in this vast chain, is 20,280 feet high, being 5000 feet higher than any other mountain in the known world. "In this spacious region," says Herrera, "are adders as red as blood, seven or eight feet long; which in the night appear like burning coals, but are not so dangerous as other serpents that are imps of darkness."

It is ingeniously observed by Goldsmith, that though few species of the serpent are venomous, the difficulty of always deciding which are and which are not so, helps to preserve even the numerous inoffensive tribes; which would otherwise soon be destroyed by animals who at present fly from them with dread and abhorrence.

BRITISH MUSEUM
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PIG-TAILED MONKEY.

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# PIG-TAILED MONKEY.

THIS animal, the Maimon of Buffon, is not larger than a cat. It has received from different naturalists, different names, but is best known by that of the Pig-Tailed Baboon, or Monkey.

Buffon remarks, that "the Ape, the Baboon, and the Monkey, form three bodies, between each of which are two intervals; the first filled up by the Magot, and the second by the Maimon: this last fills up the chasm between the Baboon and the Monkey, in the same manner as the Magot does that between the Ape and the Baboon. In fact, the Maimon resembles the Baboon by it's thick and large snout, and it's short and crooked tail; but differs from it, and approaches nearer the Monkey, by it's gentle disposition, as well as by it's size, which is much less than that of the Baboon."

The

The Pig-Tailed Monkey, Baboon, or Ape —for it has been described under all these appellations, and even by Edwards under the latter—receives it's common epithet from the circumstance of it's tail's being naked, and curled up like that of a pig; which is not the case with any other known species of either the Baboon or Monkey tribes.

It's face is naked, and of a swarthy redness; it's eyes are of a chesnut colour, and it's eye-brows black; it has two sharp canine teeth; and it's ears are like those of the human species. The crown of the head is dusky; the limbs and body are brown, inclining to cinereous; the fingers are black; the nails are long and flat; and the thumbs on the hind feet are very long, and connected to the nearest toe by a broad membrane.

Though this animal is very spirited and full of fire, it has none of that petulant impudence which is so disgusting in the Baboon; a difference imputed by Buffon to the state of the genitals, which are in the Pig-Tailed Monkey concealed

concealed within the skin. It has callosities on the buttocks; and the female is subject to menstruation.

The Pig-Tailed Monkey is a native of Sumatra, and some other southern provinces of India, as well as of Japan; for which reason it is but little adapted to sustain the rigours of our climate. That which Buffon saw at Paris lived but a very short time; and Edwards's lived only one year in London.

"This beast," says Edwards, "was brought into England in 1752. It was extremely spirited, and full of action, and was near the bigness of our common house cat: it was a male, and lived under my care only one year; and another of them, a female, happening at the same time to be exposed in a shew of beasts, I brought the two exiles together, to see if they would claim or acknowledge their kindred. The moment they came into each other's presence, they testified their mutual satisfaction, and seemed quite transported at the interview."

The

The Pig-Tailed Monkey is, in short, a very docile animal; and, in Japan, is taught innumerable tricks, and carried about by the mountebanks. Keempfer was informed, by one of these people, that the animal he possessed was a hundred and two years old. Though we cannot call this the best authority, it seems probable that, in it's native regions, the animal is very long-lived.

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RING-TAILED EAGLE.

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# RING-TAILED EAGLE.

THE Ring-Tailed Eagle, or Falco Fulvus of Linnæus, is described by Buffon, as consisting of two varieties; the Brown Eagle, and the Black Eagle.

Aristotle has not distinguished them by name; and it appears that he classed them under the denomination of Μελαιναίτος; that is, Black, or Blackish Eagle. He properly separates this species from the Golden Eagle, because it differs—First, in size; the Ring-Tailed Eagle, whether Black or Brown, being smaller than the Golden Eagle—Secondly, by the colours; which are constant in the Golden Eagle, but vary in the Ring-Tailed Eagle—Thirdly, by it's cry; the Golden Eagle often uttering a doleful plaint, while the Ring-Tailed Eagle seldom screams—Fourthly, by it's natural dispositions; the Ring-Tailed Eagle feeding all it's young in the nest, training them, and conducting them to prey after they are partly grown; while the Golden

den Eagle drives them out of it's aëry, and abandons them as soon as they are able to fly.

"It appears," says Buffon, "easy to prove, that the Brown and Black Eagle, which I have classed together, do not really constitute two distinct species. We need only compare them together, even from the characters given by nomenclators with the view of distinguishing them. They are both nearly of the same size; they are of the same brown colour, only sometimes of a deeper shade; in both, the upper part of the head and neck is tinged with ferruginous, and the base of the large feathers marked with white; the legs and feet are alike clothed; in both, the iris is of a hazel colour, the cere of a bright yellow, the bill that of blueish horn, the toes yellow, and the talons black: in short, the whole difference consists in the shades and distribution of the colours of the feathers; which is by no means sufficient to constitute two different species, especially when the number of the points of resemblance so evidently exceeds that of the difference. I have, therefore,

therefore, without scruple, reduced these two species to one. Aristotle has done the same thing, without mentioning it: but it appears that his translator, Theodore Gaza, perceived it; for he does not render Μελαιναίετος, by Aquila Nigra, but by Aquila Nigricans pulla fulvia, which includes the two varieties of this species, both of which are blackish, but the one of which is more tinged with yellow than the other. Aristotle, whose accuracy I often admire, gives names and epithets to the animals which he mentions. The epithet of this bird is λαγωφονος, or the Destroyer of Hares. In fact, though the other Eagles also prey on hares, this species is a more fatal enemy to those timid animals, which are the constant objects of their search, and the prey which they prefer. The Latins, after Pliny, termed the Eagle Valeria, quasi valens Viribus, because of it's strength; which appears greater than that of the other Eagles, in proportion to it's size."

That both the Black and the Brown Eagle come under the denomination of Ring-Tailed, cannot

cannot be denied; yet, we apprehend, they are still distinct species.

The Black Eagle, termed by Frisch, Schwartz-braune Adler, or the Black-Brown Eagle, which Buffon ranges with the Ring-Tailed Eagle, is esteemed by Linnæus a different species, under the name of Falco Melanæetus.

The specific character given by Linnæus of the Falco Fulvus, or Ring-Tailed Eagle, is this—"It's cere is yellow, it's feet are woolly, and dull rust-coloured; and it's tail is marked with a white ring. The Brown Eagle was stated, in the tenth edition of the Systema Naturæ, as a distinct species, by the name of Falco Canadensis, and described as "having a yellow cere; it's feet woolly; it's body dusky coloured; and it's tail white, tipped with brown." In the twelfth and subsequent editions, however, it is considered as merely a variety. The spaces between it's eyes and it's ears are naked; and it's breast is sprinkled with triangular spots.

Both

Both Linnæus and Pennant conceive, that Marco Polo, in his Description of the Usages of the Tartars, alludes to this species; and not, as Buffon imagines, to the Golden Eagle.

In the classings of natural history, the greatest men have frequently fallen into errors; and, perhaps, in the present instance, it would be difficult to fix, with precision, the exact boundaries of the respective species.

We feel no difficulty, however, in decidedly pronouncing, that it is the Brown kind of Ring-Tailed Eagle, which we have delineated, from Edwards, in the annexed print; and from whom we have named it, simply, the Ring-Tailed Eagle.

This bird, which seems peculiar to the northern parts of Europe, and to America, is the size of the Common Eagle. The bill is of a blueish horn colour; the upper mandible, which is arched, hangs about an inch over the lower, having an angle or tooth on each side; and the lower mandible is shorter than the upper, and inclosed in it. The irides are hazel-

hazel-coloured; and the pupil is black. Between the bill and the eyes there are spaces of bare skin of a dirty hue, thinly set with small black hairs; the head and neck are invested with narrow brown feathers, ending in sharp points; and the whole body is covered with dusky brown feathers, darker on the back, and lighter on the under side. The breast is marked with white triangular spots in the middle of each feather; the covert feathers of the wings are of the same colour as those of the body; the quills or flag-feathers of the wings are black; and a few of the quills in the first row of coverts next the back are variegated with transverse lines of a darker and lighter colour. The tail, which is of an equal length with the wings when closed, is white; except the tip of the feathers, which are black or dark brown, and the coverts under the tail are a reddish brown or bay. The thighs are invested with dark brown feathers of a very loose texture, through which a white down in some places appears; and the legs are covered, quite to the feet, with a soft reddish-brown plumage. There are four toes on each foot, very thick

and

and strong, and covered with yellowish scales; and the claws, or talons, which are black, and extremely powerful, bend almost into semi-circular figures, and terminate in very sharp points.

In Ellis's account of the White-Tailed Eagle of Hudson's Bay, it is easy to recognize the Ring-Tailed Eagle.

It was probably this species of Eagle, which is frequently seen in Ireland, of which Goldsmith relates, that a man having swam over to one of the beautiful little islands on the celebrated Lake of Killarney, for the purpose of plundering an Eagles nest, and returning with the two Eaglets tied to a string, was attacked while in the water by the parent birds—who had, unfortunately for him, perceived both their loss and the plunderer—and in a few minutes compleatly dispatched with their beaks, wings, and talons.

A more fortunate peasant, in Scotland, where the Eagle, of different species, is still more frequently found than in Ireland, as Goldsmith

Goldsmith also relates, was accustomed to visit an Eagles nest, or aëry, during the absence of the old birds, and rob their young of hares, partridges, and other delicacies, provided for them by their parents; who never discovered the theft, though they were, doubtless, under the necessity of procuring a much greater portion of food than usual, to appease the unsatisfied cravings, and consequent clamours, of their injured offspring.

15
MAY

BANKSIA PYRIFORMIS.

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# BANKSIA PYRIFORMIS.

THE Banksia Pyriformis, or Pear-shaped Banksia, is one of thoſe vegetable productions discovered at Botany Bay, when the coast of New South Wales was first explored by Sir Joseph Banks and Dr. Solander for the purpose of making botanical acquisitions, which have been named after Sir Joseph, in consequence of the indefatigable perseverance displayed by that scientific gentleman in the pursuit of his favourite study. As the great Linnæus has done Sir Joseph the honour to give, on this account, the classical name of Banksia to some of the principal plants of New South Wales, that compliment has been extended by other naturalists to the fruit which forms the object of our present enquiry.

This species, which was unknown to Linnæus, and has not received from Gaertner any

any specific character, is thus described by White, in his account of New South Wales—

"The Banksia with solitary flowers, ovate downy capsules, and lance-shaped entire smooth leaves: the capsules being larger than in any other known species."

The Banksia Pyriformis is, in fact, a ligneous, or woody pear; and has, from it's colour and form, all the resemblance of the European pear when unripe.

Many people, in New South Wales, we are assured, were at first sight of it much deceived; for, finding it hanging in clusters on the trees, and probably feeling no disinclination to food of almost any kind, they congratulated each other, that the woods were furnished with a fruit which promised to gratify the taste with something like what they were fond of in their own country: but, on hastily knocking them off the branches, and eagerly applying their teeth to them, they quickly found that there was less likelihood of losing their

their appetites, than their teeth themselves, on the occasion; since nothing but the almost iron bill of the cockatoo, or parrot, could possibly find any thing eatable in them.

It was in vain, too, that they indulged a faint hope of what the mellowing hand of time, might effect in the amelioration of this deceptive fruit, which for ever remains impenetrable by the human tooth. Yet the seed, which is winged, is not found unpleasant in flavour; and, when the pear is ripe, the fervour of the sun soon splits the ligneous part, as it appears in the annexed figure, and the seed drops out.

The fruit itself is covered with a soft down, like that on a peach; and the tree which bears it is of a moderate height, wearing a rough, uncouth aspect.

The natives call the Banksia Pyriformis, the Merry-dugur-ro. Like all the other trees of New South Wales, with the sole exception of

of the cedar, the tree which bears this ligneous pear is an evergreen.

The fruit is about double the size represented in the print; which is an exact, though reduced copy, of an original drawing from nature.

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MAY

# AMERICAN BISON.

THE Bison is defined, by Linnæus, a Beeve with horns turned upwards; a hunch back; and a very long mane and beard.

It seems agreed, by naturalists in general, that the Bison, which is called Suber by the Lithuanians, and Wisent by the Germans, is merely a variety of the cow kind, and chiefly distinguished from the rest by a lump between it's shoulders.

Buffon says, that all the southern parts of Africa and Asia are inhabited by Hunched Oxen; among which a great variety is to be met with, as far as respects size, colour, shape of the horns, &c. The Bison, or Wild Hunched Ox, is generally stronger, and much larger, than the tame Ox of India: it is, however, sometimes smaller; but this is said to depend only on the quantity of food. In Malabar, Abyssinia, and Madagascar, where the meadows are naturally spacious and fertile,

fertile, the Bisons are all of a prodigious size; in Africa, and Arabia Pætrea, where the land is dry, the Bisons, or Zebus, are of the smallest stature.

In every part of America, Buffon remarks, there are Oxen without hunches, which the Spaniards and other Europeans have successfully carried thither. These having multiplied, are now only become less in their new abodes; yet the species was absolutely unknown in South America: in all the northern parts, however, as far as Florida, Louisiana, and even to Mexico, the Bisons, or Hunched Oxen, are to be found in great numbers. These Bisons, which formerly inhabited the woods of Germany, Scotland, and other of our northern countries, have probably passed from one continent to the other; and are become, like other animals, smaller in this new world. As they have been habituated to climates more or less cold, they have preserved their coats more or less warm; and their hair is, of consequence, proportionably longer and thicker. The beard is longer at Hudson's Bay, than at Mexico; and, in general, the hair

hair is softer than the finest wool. We can, therefore, scarcely avoid believing these Bisons of the new continent to be of a different species from those of the old. Yet they have preserved all the principal characters; the hunch on the shoulders, the long hair under the muzzle, as well as on the hinder parts of the body, and the short legs and tail: and, if we give ourselves the trouble of comparing what Hernandez, Fernandez, and every other historian and traveller of the new world, have said, with what the ancient and modern naturalists have written concerning the Bison of Europe, we shall be convinced that these animals are not of a different species. Thus, the Wild and the Tame Ox; the European, Asiatic, American, and African, Ox; the Bonasus; the Aurochs; the Bison; and the Zebu; are all animals of one and the same species, which have acquired their different variations, from the several distinctions of climate, food, and treatment.

Even the hunch or wen of the Bison, is said to be no other than an accidental character, which is defaced and lost in the mixture of the

the two kinds. The Aurochs, or Ox without a hunch, is the most powerful or predominant of the two; being found in almost every climate, either wild or domesticated: but, were it the reverse, the hunch, instead of disappearing, would extend, and continue, on every one of this mixed breed. Besides, Buffon contends, this hunch of the Bison, like that of the Camel, is less the production of nature, than the effect of labour, and a mark of slavery. From time immemorial, in almost every quarter of the globe, man has constrained the Ox to carry burdens; till the habitual and often excessive load has deformed the back, and is afterwards propagated by generation. Undeformed Oxen are scarcely to be seen, except in those countries where they do not use them as beasts of burden. In all Africa, on all the Eastern continent, the Oxen are hunch-backed, from having constantly carried heavy burdens on their shoulders; but, in Europe, where they are only employed for draught, they have not undergone this alteration, and are never seen with that deformity. The first cause of this, very probably, arose from

from the weight and compression of the burdens; and a second may be found in the superior abundance of food, for it disappears when the animal is lean and ill fed. The enslaved hunch-backed animals, having escaped or been abandoned in the woods, have there produced a wild posterity, loaded with the same deformity; which, far from disappearing, may have increased, by the abundance of vegetable food in every uncultivated country.

On the whole, Buffon concludes that, out of the Buffalo, the Bonasus, the Aurochs, the Bison, and the Zebu, to each of which both the ancient and modern naturalists have given a separate and distinct species, there remain, in fact, only two; the Buffalo, and the Ox. These two animals, though greatly resembling each other, both in a domesticated state, and often living under the same roof, and fed in the same meadow, when brought together, and even excited by their keepers, have constantly refused to engender. Their nature is more distant than that of the Ass from the Horse: there even appears to be a strong antipathy between them; for it is affirmed, that a

cow

cow will not suckle the young Buffalo, and that the female Buffalo refuses the same kind office to a calf.

The reasoning of Buffon is curious; but it will not, we presume, satisfy many minds.

The Bison is generally characterised, by naturalists, as having the fore-parts somewhat resembling those of the lion, with a long shaggy mane, and a beard under the chin. The head is small; the eyes are red and fiery; the looks are furious and commanding; the forehead is extensive; and the horns are placed very far asunder. A hunch, almost as high as that of a camel, grows on the middle of the back, which is esteemed a peculiar delicacy by the inhabitants of those countries where the animal is found in a wild state.

The American Bison differs from all others in several particulars. It is larger than the Ox; has low, black, short horns; a large beard under it's chin; and long hair springing from between it's horns, which falls over it's eyes, and gives it a hideous appearance. The hunch

hunch on it's back begins at the haunches, and gradually increases till it arrives at the shoulders: the first rib before is half a yard higher than those on the back, and is three inches broad. The whole hunch is covered with long reddish hair; and the rest of the body with a sort of black wool, which is much valued in America. The breast is large; the buttocks are narrow; the neck, legs, and tail, are very short; and the head is disproportionably big.

These animals have so exquisite a sense of smelling, that it is very difficult for either men or dogs to get near them, except on the leeward side; and, so extremely timid are they, that a whole herd of American Bisons will, it is said, fly from a single dog. Yet, when wounded, they become very furious, and turn on the hunters with determined resolution.

In some parts of America, the hunting of these beasts forms a favourite diversion. The hunters, after arranging themselves in four lines, so as to form a very large square, begin to set fire to the grass, which in the hunting

season

season is usually very dry and long. As the flame runs along the lines, they advance closer together; and the Bisons, which are extremely terrified at the sight of fire, speedily fly from it, and get into a close body; when the Indian hunters rush briskly to the attack, and seldom suffer any to escape.

In Carolina, many of these animals are brought up tame: some of them, however, frequently retain their wild disposition; break through their inclosures; effect their escape; and, ravaging the fields, draw after them, wherever they penetrate, the whole of the tame herds.

The flesh of the female is esteemed excellent food; and the skin, both of the male and female, are particularly valuable.

The tongue of the Bison is said to be as rough as a file; with which, if it happens to touch a man's cloaths, it seldom fails to get him into it's power, and soon tear him in pieces.

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MAY

KING BIRD OF PARADISE.

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# KING BIRD OF PARADISE.

FEW birds, it has been remarked, have more puzzled the learned, than those which are denominated Birds of Paradise. Some have described them as inhabitants of the air, living only on the dew of heaven, and never resting on the earth; others, though they have acquiesced in the latter part of their history, admit that they subsist on flying insects: and, while some have insisted, that they have no legs; others contend, that their legs are not only very large and strong, but that they are absolutely birds of prey.

The fact is, that the inhabitants of the Molucca Isles, of which the Bird of Paradise is a native, perceiving the strong inclination of Europeans for these beautiful birds, originally practised many deceits, with a view of enhancing their value. In particular, they constantly exposed them for sale without legs, and protested that they never had any. The credulous Europeans, finding such singularly beautiful

beautiful birds destitute of legs, concluded that they must necessarily be inhabitants of a superior clime, and accordingly named them Birds of Paradise. Error, however, is happily not always long-lived; and, in the present instance, it was at length discovered, that these birds not only have legs, but that they are so disproportionably large and strong as to take considerably from the elegance of the birds, which were probably on that very account originally deprived of them by the crafty natives.

To the recent discoveries of Sonnerat, we are indebted for much additional information respecting the Birds of Paradise; which, unquestionably, exceed all other classes, in the beauty, variety, and peculiar construction, of their plumage.

It appears that they associate in large flocks, amidst the delightful spicey woods and groves of their native islands; and that the inhabitants themselves are so sensible of their superior beauty, as to name them, in their language,

guage, God's Birds. From the rapidity of their flight, as well as from their being continually on the wing in pursuit of insects, added to the circumstance of their emigrations during the tempestuous seasons of that torrid clime, they are sometimes called Swallows of Ternate.

At the beginning of August, they are seen flying together in great numbers; and, as the inhabitants of the Moluccas incline to believe, following their King, who is distinguished from his subjects by the beauty of his plumage, as well as by that respect and veneration which they are said to render him. In the evening they perch on the loftiest trees of the forest; and, particularly, on one bearing a red berry, of which they seem remarkably fond. In those trees the natives conceal themselves; and exert their utmost address to shoot the King with their arrows: for, that being effected, the greater part of the flock soon become an easy prey. On taking a number of these birds, the usual practice is, to embowel them, and cut off their legs; after which, thrusting

thrusting a hot iron up the body, to dry all internal moisture, and filling the cavities with salt and spices, they carry them to the usual resort of Europeans, by whom they are readily purchased.

Of the King Bird of Paradise, which we are now more particularly to describe, Sonnerat observes, that all his predecessors have either given an imperfect idea, or copied from defective models.

This bird, he says, is about the size of the common European blackbird. It's head, neck, throat, back, tail, and wings, are of a shining red, as bright and vivid as carmine, and of a soft and silky appearance The middle of the belly is white, terminated by a transverse bar of green below the neck; the feathers which form this bar being of a brightness and polish resembling metal. On each side of the belly, beneath the wings, there are long feathers; brown at their bases, and also a considerable way upward, but terminating in green points of the same lustre as the transverse

transverse bar on the breast. From the middle of the tail proceed two long filaments, or shafts, of blackish feathers without beards, which extend far below the tail and wings; and, near their extremities, these shafts, which there become bearded on one side, convolve themselves, so as to form a pretty large circle, open in the centre. This beautiful circle is of an emerald colour, bright and varying. About each eye there is a black spot; and the irides, as well as the bill and feet, are yellow.

It is not a little singular, however, that Clusius has described the King Bird of Paradise as the smallest of the genus. The wings, he says, are considerably longer than the body; the bill is white; the lower part of the upper mandible is covered with a sort of red silky down, as well as the forepart of the head, but the middle part about the eyes is full of black specks; the feathers on the neck and breast, which resemble silk, are of a deep black colour; the back, wings, and tail, are of a dusky yellow; beneath the breast is a black stripe as broad as the little finger; and the feathers

feathers which cover the belly are white, but black near the wings. The naked quills are slender and black, and rolled up into a kind of balls at the end; on one side of which balls there are very fine shaggy hairs, their upper parts being of a shining deep green, and their under ones of a dusky yellow.

Edwards, too, who unquestionably both described and figured from nature, says, in express terms, speaking of his King Bird of Paradise, "this very elegant bird is about the size of the chaffinch." The description, however, corresponds in several particulars with that of Sonnerat; who certainly saw the living bird at it's full growth, while Edwards might possibly describe from the stuffed skin of a young one.

BRITISH MUSEUM
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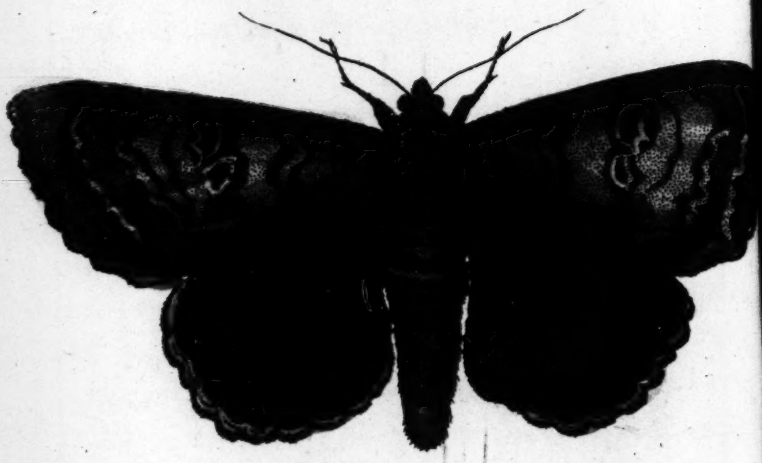
MAY



RED UNDERWING.

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# RED UNDERWING.

OF this grand and beautiful Moth, which is far from being uncommon in most parts of England, the following description has been given by the late Moses Harris; to whom we are also indebted for the annexed very accurate figure.

" The antennæ resemble threads; the thorax is crested, and of a brownish grey colour: the abdomen, and superior wings, are of the same hue; the latter having double lines, and zigzag bars crossing them in several places, with a remarkable spot on the bar tendon, which is in the middle of the wings, shaped something like the human ear.

" The under or inferior wings are of a fine scarlet colour, whence obviously arises the simple name of Red Underwing; these wings, however, have two broad bands or bars of black. The tongue is spiral; and all the wings are dentated.

" The

"The Caterpillar, which feeds on the willow, is about two inches and a half long; and it's colour is so much like that of the bark, that the animal is not easily seen when sought for. It is full fed about the latter end of June, or beginning of July, when it changes into the Chrysalis, state beneath the bark, within a spinning.

"The Chrysalis is red, covered with a fine bloom.

"The Moth, which appears in August, flies in the day-time; and is very fond of settling against barns, or the sides of such houses as are built with wood."

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RING-TAILED MAUCAUCO.

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# RING-TAILED MAUCAUCO.

By some naturalists, the Maucauco is called the Macauca, and by others the Mococo. Goldsmith uses this latter appellation; and he, with several others, describes it as a branch only of the Maki family, or those animals which approximate nearest to the Monkey race.

The Maucauco, however, a name which we shall adopt for the generic title, forms a distinct genus of animals of the Lemur tribe, in the Linnæan distribution of nature.

This genus, of which there are several species, is characterised by Linnæus, as having six cutting and two canine teeth in each jaw; a sharp-pointed visage, like that of the fox; and feet formed like the human hands.

It's hands, too, it uses, like the monkey, singly, for gathering or holding it's food; which is not the case with the squirrel, and such

such other animals as are a few links farther removed in the great chain which connects, by so many nice gradations, the almost infinite varieties of animated nature. These, indeed, feed themselves with their fore-paws, but can hold nothing in one of them singly, and are obliged to take up whatever they eat in both at once.

But, though in the conformation of the Maucauco's hands, it nearly approaches the monkey kind; in other respects, such as the make of the snout, the form of the ears, and the parts that distinguish the sexes, it entirely differs.

Of these animals there are many different kinds; all varying from each other in colour or size, but agreeing in the human-like figure of the hands and feet, and in the nose's somewhat resembling that of a dog or fox.

Buffon seems to treat them all as a hideously disgusting race of animals, not surpassed in ugliness by the worst grimaces of the baboon. We can feel no sufficient reason for this idea, in

in the figure or description of any Maucauco with which we are acquainted. In none of them does there appear to us, from their general formation, a capability of gestures equally repulsive with those which mark almost every species of the baboon.

The Ring-Tailed Maucauco, indeed, of which we are at present more particularly to speak, is so far, in our judgment, from being what is denominated ill-favoured; that we shall not be singular, we apprehend, in acknowledging our opinion, that it is really a pleasing and even beautiful little animal.

It is, in size, not much larger than a common domestic cat; but the body and limbs are more slender, and of a longer make. The hind legs, too, are considerably longer than the fore ones. The tail, from which this animal derives it's specific name, is double the length of the body: it is covered with fur, and alternately marked with broad rings of black and white. The extraordinary size of the eyes is very remarkable; and they are surrounded by a broad black space. The end of the nose

is

is also black; the face is white; and the ears are erect. The head is covered with dark cinereous hair; that of the back and sides is somewhat lighter, and frequently of a reddish hue; the hair on the outsides of the limbs is paler; and that on the belly, and insides of the limbs, is white: the whole being soft, glossy, and delicate; smooth to the touch, and erect like the pile of velvet. The nails are flat, and the insides of the hands and feet are black. When the animal sleeps, it brings it's nose to it's belly, and it's tail over it's head.

In somewhat of this attitude, though not sleeping, our figure of the Ring-Tailed Maucauco is delineated. The fruit which it holds, is to shew that it uses only one hand in eating.

This animal, which is a native of Madagascar and the neighbouring islands, is extremely gentle; and, though it in many respects resembles the monkey, it neither possesses it's irreclaimably malicious nor mischievous habits.

Like the monkey, however, it is active,

and

and perpetually in motion; and, like all four-handed animals, moves in an oblique direction.

It is exceedingly cleanly; has a feeble cry; and, when taken young, is tamed with the greatest ease.

The Ring-Tailed Maucauco, as well as most of the other species, is a gregarious animal. They associate in flocks of thirty or forty; and, apparently, concert together plans of operation, which are assisted, like those of the higher orders of animated life, by a mutuality of exertion.

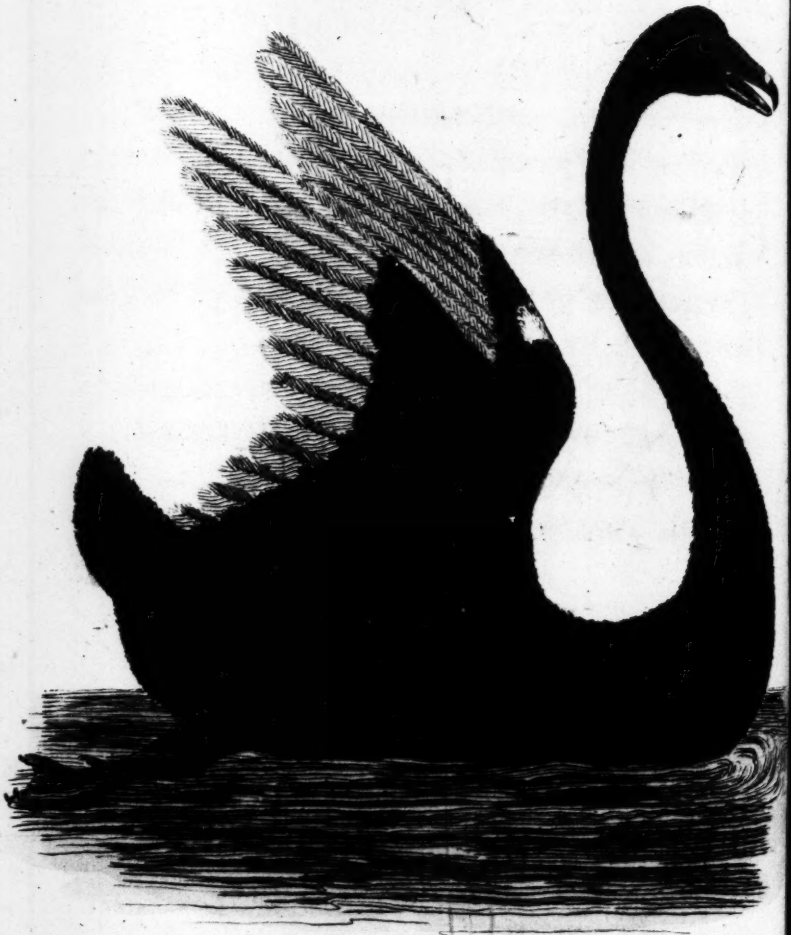
Goldsmith, in his account of the Coati-mondi, says—"This animal is very subject to eat it's own tail, which is rather longer than it's body: but this strange appetite," he adds, "is not peculiar to the Coati alone; the Mococo," by which he means the Ring-Tailed Maucauco, "and some of the Monkey kinds, do the same, and seem to feel no pain in wounding a part of the body so remote from the centre of circulation."

According

According to Flacourt, the Ring-Tailed Maucauco is sometimes found white. Cauche, in his Voyage to Madagascar, also speaks of a white kind, which grunt like swine, and are called by the natives Amboimenes.

Pennant, who enumerates and describes eleven species of the Maucauco, has collected the following different names, under which the Ring-Tailed Maucauco is mentioned or described by different travellers and naturalists.

By Flacourt, in his History of Madagascar, it is called Vari; by Grose, in his Voyage to the East Indies, Mocawk; by Edwards, Maucauco; by Linnæus, Lemur Catta; and by Buffon, Mococo.



BLACK SWAN, OF NEW SOUTH WALES.

Published, Dec. 8, 1798, by Harrison, Cluse, & Co. N.38, Fleet Street.

# BLACK SWAN,

## OF NEW SOUTH WALES.

THOUGH every schoolboy, on entering into the Syntax of Lilly's Latin Grammar, becomes acquainted with the popular phrase—"Rara avis in terris, nigroque simillima Cygno," this uncommon bird has, till within these few years, been wholly unknown; at least, to all modern naturalists.

We have received from an intelligent friend, who was probably one of the party alluded to, the following acount of it's first discovery.

"In an excursion made by some gentlemen to the northward of Port Jackson, in the year 1788, this ſtately bird was firſt seen, swimming erect, and undismayed at their approach, in a small creek that led to some waters which are found between Port Jackson and Broken Bay. It's appearance was so grand and novel, that the temporary surprise which succeeded, allowed it time to get on the wing,

wing, and escape unhurt. Several of these birds were afterwards killed; and the flesh, though coarse, was found to be very palatable.

"These birds have been seen in great numbers, in the lagoons, or ponds, which lay between the two harbours abovementioned; where, among the thick sedges which skirt the borders of them, they deposit their eggs, and hatch their young. The feathers of these continue, for some time after they are produced, of a very light brown.

"Those who amused themselves with shooting these birds, found the parents an easy prey when attended by their young; for nothing could induce them to quit them, though fired at from every direction and themselves frequently wounded, while their offspring had life. The same affection has been noticed between the male and female birds.

"The natives of New South Wales name this bird Mulgo."

Latham

Latham calls it, "Anas Nigra, remigibus albis," or the Black Swan with white remiges; and, in a late edition of the Linnæan System, it has been characterized under the appellation of Anas Plutonia.

The annexed print is copied from a very exact drawing, kindly furnished by the gentleman who has favoured us with the above particulars which come within his own knowledge. He adds, that the bird rises very heavily from the water; and, that it's colour is not absolutely black.

It is, however, of such a sooty darkness, as fairly to warrant the appellation which it has obtained.

In size, and general appearance, with the exception only of colour, it bears the most striking resemblance to the Common Swan; and is remarkable for all that stateliness, and graceful dignity of action, in it's various motions and attitudes, which so peculiarly mark this eminently distinguished European bird.

The

The Black Swan is wholly of that dark hue from which it derives it's name; with the sole exception of the long wing-feathers, or remiges, which are white. The beak, which is of a fine red, has a blackish tip on the upper mandible, and on the curvature near the tip is a spot of yellow. The feet are somewhat lighter than the legs, which are of a deep black.

From the snowy whiteness invariably found to preside over the plumage of the Common Swan, no small number of those who believe nothing but what they see, and who think themselves, what they certainly are not, the wisest of mankind, for a considerable time refused their assent to the possibility of a Black Swan's existence. It has, however, been abundantly proved, even in their own way; the stuffed bird having been repeatedly seen in England. We cannot, however, positively assert, that the Black Swan has yet made it's appearance alive in any part of Europe; though we see no good reason why it might not be brought over, and even bred in our climate.

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70
MAY

ELEPHANT BEETLE.

Published Dec.8.1798. by Harrison Clase & Co. N.°78. Fleet Street.

# ELEPHANT BEETLE.

AMONG the Beetle, or Scarabæus tribes, as they are denominated by Linnæus, the Elephant Beetle stands super-eminently distinguished.

In this numerous race of insects, besides the differences resulting from the various shapes and colours of the different species, the variety of their sizes is remarkable; some being smaller than the head of a pin, and others as large as a man's fist.

The Beetle families are distinguished by having two transparent wings, with cases or shells which cover them closely while at rest, but allow them their proper play when flying. They are all bred first from the egg; then become a grub; next a chrysalis, in which the parts of the future fly are distinctly visible; and, lastly, the Beetle quits it's prison, breaking forth as a winged animal in full maturity.

The

The cases to the wings of the Beetle tribes are the more necessary, as they all live frequently beneath the surface of the earth, in holes dug out by their own industry. These cases, though they do not assist flight, but probably tend, if not to retard it, at least to limit it's duration, nevertheless serve to shield the insect from injury while in it's subterranean situation, as well as to preserve the internal wings clean and even, and produce a loud buzzing noise when the Beetle rises into the air.

The security, indeed, which this insect derives from it's shelly covering, has called forth the moralizing ideas of our unequalled bard.

" And often, to our comfort, shall we find,
The sharded Beetle in as safe a hold
As is the full-winged Eagle."

SHAKSPEARE.

The Beetle, indeed, seems to have been particularly regarded by Shakspeare; who makes, in it's behalf, one of his noblest appeals to humanity.

" E'en the poor Beetle, that we tread upon,
In corporal sufferance feels a pang as great,
As when a Giant dies!"

The

The formation of the Beetle, whatever may be it's species, is always like that of shell-fish; the bones being placed externally, and the muscles within. These muscles greatly resemble those of quadrupeds in their formation; but are endued with such surprising strength that, bulk for bulk, they are a thousand times stronger than those of man. This prodigious strength of the muscles is eminently useful in digging the animal's subterraneous abode; where it is generally hatched, and to which it most frequently resorts, even after it becomes a winged insect capable of flying.

To what has been remarked respecting the vast diversities of the Beetle families, may be added the wonderful differences in their original production. Some being produced in a month, and going through all their stages of existence in a single season; while others take nearly four years in attaining to maturity, and live as winged insects a year afterwards.

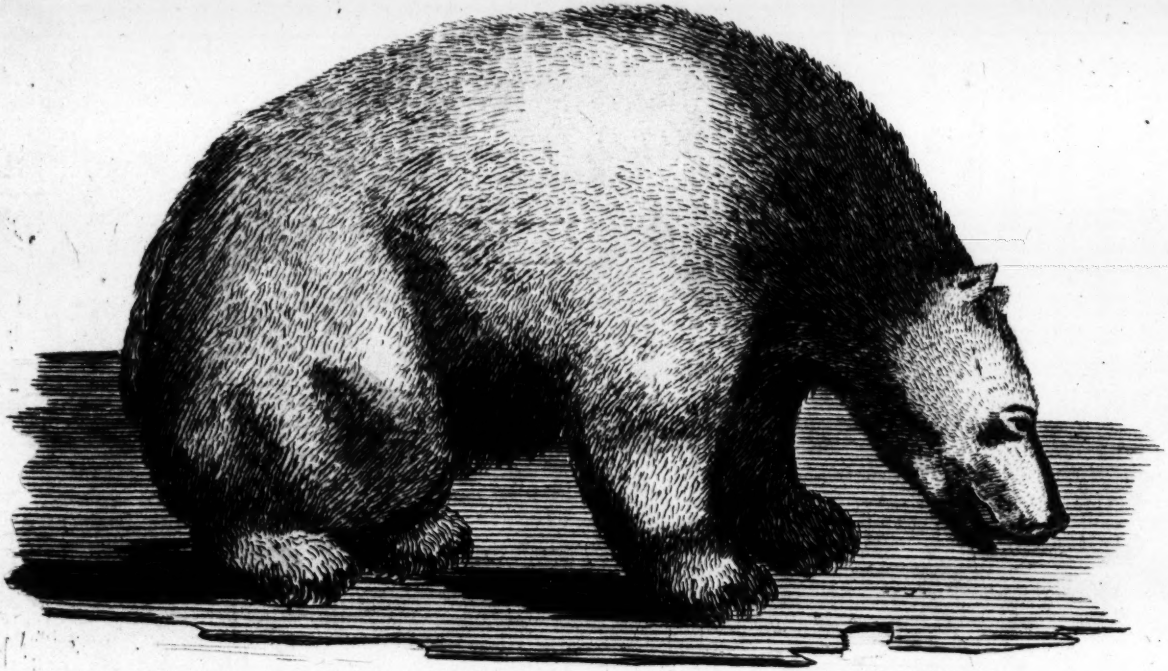
The Elephant Beetle, considerably the largest of the genus hitherto known, is found in South America; particularly, at Guiana, Surinam,

rinam, and about the River Oroonoko. It is of a black colour; the whole body being covered with a very hard shell, full as thick and strong as that of a small crab. It's length, from the hinder part to the eyes, is almost four inches; and, from the same part to the end of the proboscis, or trunk, from which it derives it's name of the Elephant Beetle, four inches and three quarters. The transverse diameter of the body is two inches and a quarter; and the breadth of each elytron, or case for the wings, is an inch and three tenths. The antennæ, or feelers, are quite horny; for which reason, the proboscis or trunk is moveable at it's insertion into the head, and seems to supply the place of feelers. The horns, which are eight-tenths of an inch long, terminate in points. The proboscis is an inch and a quarter long, and turns upwards, making a crooked line, which terminates in two horns, each nearly a quarter of an inch in length, but not perforated at the extremity like the proboscis of other insects. About four-tenths of an inch above the head, or that side next the body, there is a prominence or small horn, which would, if the rest of the trunk were away,

away, cause this part to resemble the horn of a rhinoceros. There is, indeed, a Rhinoceros Beetle; the horns or trunk of which, however, have no fork at the end, though the lower horn resembles this. The feet are all furcated at their extremities, but not like the claws of the lobster.

The annexed figure is an exact representation of the Elephant Beetle; specimens of which are preserved in the Leverian Museum.

Of any peculiar habits which may distinguish this species, we have no information that can be depended on. It is probable, however, that they are nearly the same as in those Beetles which it most resembles in size and conformation.



WHITE BEAR.

Published Decr 15 1796 by Harrison Parr & Co. No 72 Fleet Street

# WHITE BEAR.

THE White Bear is frequently called in England the Greenland Bear; and sometimes, by naturalists, the Polar Bear.

The length of this animal is said to be often thirteen feet; and it seems to be almost the only creature which, by being an inhabitant of the arctic regions, grows larger than those of the same tribes in more temperate climes. The rest of animated nature, in general, as they approach the poles, seem to suffer a diminution of size through the regions of the surrounding atmosphere; but the White Bear, unmolested in these desolate climes, and meeting with no opponent more powerful than itself, grows to an enormous magnitude: and, as the lion is the tyrant of the African forests, so the White Bear sways his rude sceptre over the icy mountains of Greenland and Spitzbergen.

The

The White Bear has a long head and neck; short round ears; large teeth; and limbs of vast size and strength. It's hair, which is long and soft, is of a white colour, tinged in some parts with a dirty yellow.

In Martin's Spitzbergen, where this animal is particularly described, it is said to bark almost like a dog that is hoarse; to be less clumsy, and more nimble, than the common Bear; and to have a head so far from being very tender, like the head of the common Bear, that he saw it receive, without being in the smallest degree stunned, several blows on that part, which he is persuaded would have knocked down an ox.

The White Bear is confined to the coldest part of the globe. It has been found as far as navigators have penetrated northwards above latitude 80. The frigid climes alone seem adapted to it's nature. It is unknown, except on the shores of Hudson's Bay, Greenland, and Spitzbergen. The north of Norway, and of great part of Russia, are destitute of this animal; but it is abundantly seen again,

again, in Nova Zembla, and from the River Ob, along the Siberian coast, to the mouth of the Jenesei and Lena. It is, however, never met with far inland, except when it loses it's way in mists; nor is it found either in Kamtschatka or it's islands. It has been seen as far south as Newfoundland; but is not a native of that country, being only carried thither accidentally on floating islands of ice.

During the summer season, the White Bear either resides on an island of ice, or employs itself in passing from one of these islands to another: for it swims admirably; can continue that exercise, as some assert, six or seven leagues; and dives with wonderful agility. In winter, it either retreats under the snow, where it forms deep dens, supported by pillars of the same congealed element; or retires under some great eminence beneath the fixed ice of the frozen sea.

The female brings forth two young at a time; and so strong is their mutual affection, that they suffer death rather than desert each other.

These

These animals feed on fish, seals, the carcases of whales, and even on human bodies; which last they often greedily dig out of their graves. They are said to be particularly fond of human blood; and are sometimes so daring as to attack companies of armed men. It is, indeed, very common for a drove of White Bears to rush, from the surrounding ice, towards our Greenlandmen; and, climbing up the sides, board the vessel, in search of that blubber, the scent of which so powerfully attracts them. On these occasions, however, the sailors, who generally perceive them coming, instantly run aloft; and, with their muskets, soon dispatch these unwelcome visitants.

Even at land, where they often devour birds and their eggs, allured by the smell of the seal's flesh, they not unfrequently break into, and plunder, the houses of the Greenlanders.

Frequent, and terrible battles, ensue between the White Bear, and the morse or the whale: in these conflicts, the vaſt teeth of the morse usually give it a decisive superiority; and

and the whale also, being in it's own element, commonly proves too powerful for it's four-footed opponent. When, however, it meets with a young whale or morse, it amply repays itself for every injury received in it's rencounters with the parents.

The White Bear has frequently been brought alive to England: but it appears uneasy, and restless; and has, even in our winter, the appearance of suffering from extreme heat, except when it has cold water thrown over it, without which it would not long survive.

The flesh of the White Bear, though by most naturalists said to taste like mutton, Goldsmith asserts, in consequence of it's feeding on fish and seals, is too strong for food. The fat is melted for train oil; that of the feet being reserved for medicinal purposes. The liver, Pennant remarks, is very unwholesome; as three of Barentz's sailors experienced, who fell dangerously ill on eating some of it boiled. The skin makes an excellent warm and durable cloathing.

"The

"The number of these animals," says Goldsmith, "that are found about the north pole; if we consider the scarcity, there, of all other terrestial creatures, is very amazing. They are not only seen at land; but often on ice-floats, several leagues at sea. They are often transported in this manner to the very shores of Iceland; where they no sooner land, but all the natives are in arms to receive them. It often happens," adds the doctor, "that when a Greenlander and his wife are paddling out at sea, by coming too near an ice-float, a White Bear unexpectedly jumps into their boat; and, if he does not overset it, sits calmly where he first came down, and like a passenger, suffers himself to be rowed along. It is probable the poor little Greenlander is not very fond of his new guest; however, he makes a virtue of necessity, and hospitably rows him to shore."

Buffon, who very reluctantly admits the claim of the White Bear to be considered as a different species, asserts that, when these animals find any prey on land, they do not give themselves the trouble to seek for food in the

the sea: they devour rein-deer, and any other beasts they can seize; they even attack men, and dig up dead carcases. But, when almost famished, as they often find themselves in those barren and desart countries, they are obliged to live in the ocean. They plunge in, to seize the young seals, and other marine animals; and they rest on the ice, waiting their prey, which they perceive, from their station, approaching at a great distance. As long as they find this post produces them an abundant subsistence, they never quit it: so that when the ice begins to float, in the spring season, they suffer themselves to be carried away with it; and, as they cannot now rejoin the land, or even quit the ice on which they are embarked for any long time together, they often perish in the open sea. Those which arrive on the coasts of Norway and Iceland, with these floats of ice, are so greatly famished, as to fly with the utmost ferocity on every creature they meet, in order to devour it; and what has still augmented the prejudice, that these White Bears are of a more ferocious or more voracious kind than the common Bear, is because some authors have persuaded themselves

selves that they were amphibious, like the seal, and that they even remain under water as long as they please. The contrary, however, Buffon maintains, is evident from the manner in which they exist. They even swim, he says—though other naturalists speaks very differently—but a short time together, and not more than a mile at once; they are easily followed by a boat till weary; and, though they sometimes plunge to the bottom of the water, to refresh themselves, they are soon obliged to rise to the surface for fear of drowning, when the hunters kill them.

Bears sometimes wholly white, but more frequently brown, or black spotted with that colour, are occasionally seen on the parts of the Russian borders in Siberia, in a wandering state; which are supposed, by Dr. Pallas, to have strayed out of the lofty snowy mountains which divide the two countries.

INDIAN SPOTTED WOODPECKER.

*Published, Dec. 15, 1798, by Harrison, Cluse & Co. N°. 78, Fleet Street.*

# SPOTTED INDIAN WOODPECKER.

WOODPECKER is the English general appellation, for a genus of birds of the Picus kind, of which there are numerous varieties, some of them in almost every part of the world. They all subsist entirely on ants and other insects; and their principal action is that of climbing up and down the trunks or boughs of trees, for the purpose of procuring their food. They have a long slender tongue, armed with a sharp bony point barbed on each side; this, assisted by a curious apparatus of muscles, they can exert at pleasure, darting it to a great length into the clefts of the bark, where they transfix, and instantly extract, the concealed insects. They are also said to bore holes, with their bills, in hollow rotten trees; as well to come at the insects within, as to deposit their own eggs.

These are habits which may, in a general view, be considered as common to the whole kind. There are, however, some exceptions; particularly, with respect to the Woodpeckers of

of Guinea and Brasil; which suspend their curiously constructed nests from the extremities of the branches of trees, equally secure from the monkies on the same boughs, who dare not venture so far, and the numerous snakes, which in vain wreathe their terrific forms around the trunks below.

The Spotted Indian Woodpecker, or Picus Bengalensis of Linnæus, is called by Albin the Bengal Creeper; and, by Buffon, the Green Woodpecker of Bengal.

We have adopted, however, both the name and the figure of Edwards.

It is smaller than the Green European Woodpecker; and has a long, ſtraight, blackish bill, ridged on the upper part. The crown of the head, from the bill backwards, and beyond the eyes, is black speckled with white; but the hinder part of the head is covered with long scarlet feathers, tending backwards in form of a crest. The sides of the head below the eyes are white; and the throat, from the bill

bill to the middle of the breast, is irregularly variegated with large black and white spots. The hinder part of the neck is black; and, on each side, there runs a white line down to the wings. The beginning of the back is yellow; but the lower part, and the rump, are of a dull green hue. The belly, thighs, and coverts beneath the tail, are white, sprinkled with semilunar spots. Some of the exterior primaries are black, barred with white; the remainder, and the coverts of the wings, are of a dull green colour; and the lesser coverts are a dark brown, with distinct white spots. The tail is blackish, with a cast of dull green; the feathers of which it is composed being stiff and pointed. The legs and claws are dusky.

Buffon says, that the Green Woodpecker of Goa, which he considers as one of the most beautiful of the Woodpeckers, bears a striking resemblance to this bird: and, from this similarity, joined to the circumstance that they inhabit contiguously, he is induced to conclude that they are the same; or, at least, two kindred species. The Goa Woodpecker, however,

however, he acknowledges, has it's bill one-third larger than that of Bengal, or our Spotted Indian Woodpecker of Edwards.

The Green Bengal Woodpecker of Brisson, as well as his Cape of Good Hope Woodpecker, which last bears a still closer resemblance, Buffon positively classes with this Bengal or Spotted Indian Woodpecker. He is of opinion, that Brisson described the Cape Woodpecker from nature, and the other from Edwards's figure.

METROSIDEROS LANCEOLATA.

Published Dec.15.1798 by Harrison, Clause & Co. N.°78. Fleet Street

# METROSIDEROS LANCEOLATA.

THIS beautiful ever-green shrub is one of those vegetable productions of New South Wales, which have been classed under the general title, Banksia.

It is, according to the Linnæan system, of the Icosandria Monogynia order; and is, by some naturalists, called the Metrosideros Citrina, or Harsh-Leaved Metrosideros.

The name Metrosideros was originally given, by Rumphius, to some plants of this genus found at the Dutch settlement of Amboyna. The term is classically significant of the hardness of the wood for which those plants are distinguished; and which, in the Dutch language, is called Yzerhout, or Iron-wood. Forster figures this and another genus on the same plate, under the name Leptospermum; and, Schreber, in his Linnæus, places Metrosideros, Melaleuca, Leptospermum,

mum, and Fabricia, all under the genus Melaleuca: but Gœrtner, in his elaborate work on the seeds of plants, makes them separate genera, in conformity with the ideas of Sir Joseph Banks and Mr. Dryander.

The Metrosideros Lanceolata, under the name of Metrosideros Citrina, has been figured and described by Mr. Curtis, from a plant of English growth, produced toward the close of the summer 1793, at Lord Cremorne's. But, though the root, as Mr. Curtis informs us, came from Botany Bay, the flowering, on the slightest inspection of the print, will be found so different from that which we have delineated with all the accuracy of which coloured engravings are susceptible, from the actual plant as it flowers in New South Wales, that even it's kindred might almost fail to be recognized by any person not an adept in the botanical science. The flowers, in fact, so far from appearing one blended mass of crimson filaments, unencumbered by surrounding leaves, and forming, as it were, a single flower, headed like a spear, as in the annexed

annexed print, spring from the stem at considerable distances, and have most of them attendant leaves, so as to wear a quite different aspect.

Mr. Curtis describes it as an evergreen shrub, growing from the height of from four to six or more feet. He observes, that it's leaves on the old wood feel very harsh or rigid to the touch; and, when bruised, give forth an agreeable fragrance. The flowers, he adds, grow in spikes on the tops of the branches, and owe their beauty wholly to the brilliant colour of the filaments.

To this we may add that, in it's native clime, it grows to about five feet in height; flowers in December; and is found to thrive best in a marshy soil. It is highly melliferous, so as even to be clammy to the touch; but the bloom is without fragrance.

Many gardens in England, and most of the nurseries in the vicinity of the metropolis, now boast the possession of this beautiful shrub;

shrub; which is raised, without difficulty, both from cuttings and seed, and has been thought to improve by cultivation. It does not, however, usually flower, at least in England, till about the fifth or sixth year.

An account of the Metrosideros Lanceolata, as described by the learned and ingenious Dr. Smith, may be seen in the Transactions of the Linnæan Society, vol. iii.

VARIED SQUIRREL.

Published Dec. 29. 1798. by Harrison Gosse & Co. 112 Fleet Street.

# VARIED SQUIRREL.

THE Varied Squirrel, or Sciurus Striatus of Linnæus and other naturalists, is supposed, by some, to be the same animal as the Coquallin of Buffon; which Goldsmith calls the Brasilian Squirrel, and describes as being a beautiful animal of the kind, very remarkable for the variety of it's colours. It's belly is said to be of a bright yellow; it's head and body being variegated with white, black, brown, and orange colour. It wants the tufts at the extremities of it's ears; and does not climb trees, as most of the kind are seen to do.

In this description, unquestionably, there is much resemblance to that of the Varied Squirrel of Edwards, hereafter to be described: and, indeed, it seems evident to us, that there is an entire class of these striped Squirrels, originally from one family, perhaps, but bearing very different degrees of affinity. The Grey Virginian Squirrel, called by

by Buffon the Petit Gris—that being the French name of it's valuable fur, though very inapplicable to the size of the animal itself, which is larger than a rabbit—Goldsmith says, "has a beautiful red streak on each side lengthways." The Barbary Squirrel, of which Buffon makes three varieties, "is of a mixed colour, between red and black; and, along the sides, there are white and brown lines, which render this animal very beautiful; but what still adds to it's elegance is, that the belly is of a sky blue, surrounded with white." The Squirrel of New Spain, which is of a deep iron grey, is said also, by Goldsmith, to have "seven longitudinal whitish streaks along the sides of the male, and five along those of the female."

In our opinion, however, what Goldsmith calls the Little Ground Squirrel of Carolina, is the only animal which he mentions that can be truly considered as our Varied Squirrel of Edwards. This, indeed, as far as Goldsmith's description goes, which is comprehended in the few following words, will be found so far

far compleatly to correspond: "It is of a reddish colour; has blackish stripes on each side; and, like the former," meaning the Brasilian Squirrel, or Coquallin of Buffon, "delights not in trees."

Here, too, as well as in the Coquallin, we find a trait of distinction between even the Striped Squirrels, that of preferring the ground to trees; which seems to imply, that there may have been two different families, in their origin, of the Striped Squirrels only.

From these speculative ideas, however, we proceed to the actual description of the Varied Squirrel, as accurately figured and described by Edwards.

The nose and feet of this animal are of a pale red colour; the eyes are full; and the ears are plain. The ridge of the back is marked with a black streak; and each side has a pale yellow stripe, bounded above and below with a line of black. The head, body, and tail, are of a reddish brown hue; and the breast and belly are white.

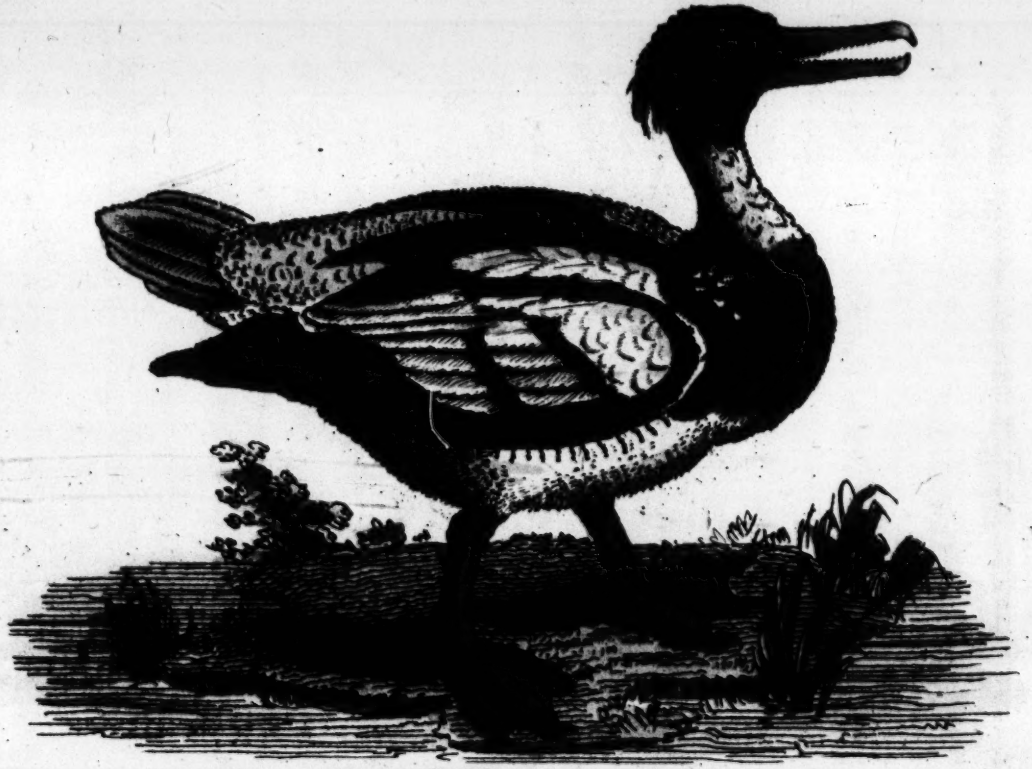
Varied

Varied Squirrels inhabit the north of Asia, and greatly abound in the forests of North America. They seldom ascend a tree; unless when they are pursued, and have no other means to effect their escape. They burrow under ground; and form their habitations with two avenues each, that they may have a ready access to the one, should the other by any accident be stopped up. These retreats are very ingeniously contrived. Their general form is that of a large gallery, with two branches on each side; and, at the end of each branch, there is a spacious chamber, which serves as a magazine for winter stores. In one of these chambers they deposit acorns; in another, maize; in a third, hickery nuts; and, in the fourth, chesnuts, which are considered as their most favourite food. If their stock of provision holds out, they seldom stir from their apartments during the winter season; but, when these are exhausted before nature enables them to obtain new supplies in the regular course, they dig into the cellars, where apples are usually preserved by the natives; or penetrate into their barns and granaries, and carry away astonishing quantities of the maize there-

in

in deposited. The cats, however, frequently destroy them, on these occasions, in prodigious numbers, or their depredations would not seldom prove ruinous to the farmer.

The Varied Squirrel bites very severely; and is of so extremely wild a nature, that it is hardly possible ever to tame it. The skin, which is of but little value, is sometimes used for the linings of cloaks.



RED-BREASTED GOOSANDER.

# RED-BREASTED GOOSANDER.

THE Goosander forms a distinct tribe of water-fowl. It has a round bill; the body and wings are shaped like those of the penguin kind; and it's legs are not hid in the belly.

Goldsmith observes, that "the Goosander may be distinguished from all others by it's bill; which is round, hooked at the point, and toothed, both upper and under chap, like a saw. It's colours," he adds, "are various and beautiful: however, it's manners and appetites entirely resemble those of the diver. It feeds on fish, for which it dives; and is said to build it's nest on trees, like the heron and the cormorant. It seems to form the shade between the penguin and the goose kind: having a round bill, like the one; and unembarrassed legs, like the other. In the shape of the head, neck, and body, it resembles them both."

This bird, which dives with great dexterity, frequents the rivers and lakes of Great Britain, particularly

particularly in severe winters; but it's native regions seem to lie in higher northern latitudes. The length of the male is about two feet four inches; the breadth about three feet two inches; and the weight four pounds. The bill is three inches long, narrow, and finely serrated; and both that and the sides are red. The head is large; and the feathers on it's hind part are long and loose.

The female of the common Goosander is less than the male; and has frequently been called, by naturalists, who erroneously considered it as a different species, the Dun Diver.

The Red-Breasted Goosander, which breeds in Scotland and the Hebrides, is much smaller than the common species. It's length is one foot nine inches; it's breadth two feet seven inches; and it's weight little more than two pounds. The bill is three inches long; the lower mandible being red, and the upper dusky: and the irides are of a purplish red. The head and throat are of a beautiful varying black and green; the former being adorned with a long

pendent

pendent crest of the same colour. The upper part of the neck, of the breast, and the whole belly, are white; the lower part of the breast is ferruginous, spotted with black; the upper part of the back is black; and, near the insertion of the wings, there are some white feathers, edged and tipped with black. The exterior scapulars are black, the interior being white; the lower part of the back, the coverts of the tail, and the feathers that cover the thighs, are elegantly marked with wavy lines of black; the coverts on the ridges of the wings are dusky; the greater coverts are half black and half white; the secondaries, next the quill-feathers, are marked in the same manner; and the quill-feathers are dusky. The tail is short, and of a brown colour; and the legs, which are strong, are orange-coloured.

In the female, the upper part of the neck is of a deep rust-colour; the crest is short; the throat is white; the fore parts, both of the neck and breast, are marbled with deep ash-colour; the belly is white; the great quill-

quill-feathers are dusky; the secondaries are black and dusky; and the back, scapulars, and tail, are ash-coloured.

BRITISH FREE MUSEUM
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PEPPERMINT OF NEW SOUTH WALES.

*Published Dec. 22. 1798. by Harrison & Co. No. 78, Fleet Street.*

# PEPPERMINT
## OF NEW SOUTH WALES.

THE annexed figure, which we have denominated the Peppermint of New South Wales, represents a small branch of a tree which grows plentifully in that part of the world, and has obtained the name of the Peppermint Tree, among the European settlers; in consequence of the very great resemblance between the essential oil drawn from it's leaves, and that obtained from the Mentha Piperita, or common Peppermint, which grows so abundantly in England and other countries of Europe.

The drawing, which we have exactly copied, is not more than about double the size of our print, yet it is said to be the natural size. It presents to view the capsules, of a red colour, not very unlike our hawthorn berries; the size being as similar as the hue.

All

All we can vouch for is, that our figure presents the semblance of nature, in a branch positively taken from the tree in New South Wales, and drawn with precision on the spot. Much difference, however, certainly appears, between our subject, and that which has been figured and described in Mr. White's very respectable account of New South Wales.

In that gentleman's representation of the Peppermint Tree, the leaves appear merely green, without those ferruginous markings so conspicuous on the leaves of our figure. The capsules, too, which were avowedly taken in a dry state, seem very different, as well in form as in colour.

We have too little information, to decide positively on the causes of these variances, which are abundantly manifest to the eye; some idea, however, may perhaps be collected, from the following ingenious account of the Peppermint Tree, as given in Mr. White's work, which we shall take the liberty to transcribe for the gratification of our readers.

"The

"The Peppermint Tree, or Eucalyptus Piperita, grows to the height of more than a hundred feet, and is above thirty feet in circumference. The bark is very smooth, like that of the poplar. The younger branches, which are long and slender, are angulated near the top; but, as they grow older, the angles disappear. Their bark is smooth, and of a reddish brown. The leaves are alternate, lanceolate, pointed, very entire, smooth on both sides, and remarkably unequal, or oblique, at their base; the veins alternate, and not very conspicuous. The whole surface of both sides of the leaves is marked with numerous minute resinous spots, in which the essential oil resides, The foot-stalks are about half an inch in length, round on the under side, angular above, and quite smooth. The flowers we have not seen. What Mr. White has sent as the ripe capsules of this tree, (although not attached to the specimen of the leaves) grow in clusters, from six to eight in each, sessile, and conglomerated. These clusters are supported on angular alternate footstalks, which form a kind of panicle. Each capsule is about the size of a hawthorn berry, globular,

but

but as it were cut off at the top, rugged on the outside, hard and woody, and of a dark brown colour. At the top is a large orifice, which shews the internal part of the capsule divided into four cells, and having a square column in the centre, from which the partitions of the cell arise. These partitions extend to the rim of the capsule, and terminate in four small projections, which look like the teeth of a calyx. The seeds are numerous, small, and angular."

The oil obtained from the leaves of this tree has been experienced to be much more efficacious in removing all cholicky complaints, than that of the English Peppermint; which Mr. White attributes to it's being less pungent, and more aromatic.

This Peppermint Tree of New South Wales appears to be of the same genus with a tree which is cultivated in some English greenhouses, and which Mr. L'Heritier has described, in his Sertum Anglicum, by the name of Eucalyptus Obliqua; though it is commonly called, in the gardens, Metrosideros Obliqua: but

but we dare not assert it to be the same species; nor can this point be determined, by any botanist, till the flowers, and every other part, are seen and compared together. The best specimens of each, which could be procured in England, have in fact been compared, and no specific difference was found to exist between them. The Eucalyptus Obliqua, when dried, has an aromatic flavour, somewhat similar to our plant. "We have remarked, indeed," says Mr. White's account, "innumerable minute white spots, besides the resinous ones, on both surfaces of the leaves, in some specimens of the garden plant, which are not to be seen in our's; and the branches of the former are rough, with small scaly tubercles. But how far these are constant, we cannot decisively pronounce. The obliquity in the leaves, one side being shorter at the base than the other, as well as somewhat narrower all the way up, as in the Begonia Nitida of the Hortus Kewensis, is remarkable in both plants."

A quart of the essential oil of this New South Wales Peppermint was sent, by Mr. White,

White, to Mr. Wilson, an eminent druggist in London; but we have not heard to what uses it was applied, or whether any large quantity has since been brought over to England.

Ass.

# ASS.

THIS well-known useful but neglected quadruped, from it's great resemblance to the horse, might naturally be supposed of the same species, only somewhat degenerated from that noble animal: the species, however, are perfectly distinct, and there is an inseparable line drawn between them, the animal produced from the mixture of a horse and an ass being barren. This, indeed, seems to be the barrier between every species of animals, which keeps them asunder, and preserves the unities of their forms. If the mule, or monster, bred between two animals whose forms nearly approach each other, be no longer fertile; we may conclude that the animals, whatever external similitude appears between them, are distinct and separate kinds. Nature, who always provides for the perfection and preservation of her productions, has wisely stopped the fecundity of these ill-formed productions, to preserve the form of every animal uncontaminated: were not this the case, the different

species

species of animals would soon be blended with each other; no one kind would preserve it's original perfection; every creature would quickly degenerate; and the world must inevitably be over-run with monstrous and deformed productions.

The horse and the Ass, though they somewhat resemble each other, are nevertheless of two distinct kinds, and very different in their natures, tempers, and habits. Their shapes and manners possess a considerable degree of similarity; but there is something in every animal, besides it's conformation and way of life, which determines it's specific nature. Thus, between the horse and the Ass, there is a much stronger resemblance than between the goat and the sheep; and yet the latter produce an animal capable of reproducing an offspring which resembles a sheep, while the mule of the former is marked with invariable sterility. The goat and the sheep may, therefore, be denominated of one species, though so unlike in figure; while the horse and the Ass are perfectly distinct, notwithstanding they are so nearly allied in conformation. It is, indeed,

indeed, asserted by Aristotle, that the male mules were sometimes prolific; but this assertion has never yet been confirmed by any positive testimony, though a period of nearly two thousand years has elapsed since it was first advanced.

Before the discovery of America, the Ass seems to have been entirely unknown on that continent, though the climate is peculiarly favourable to this race of animals; and, where they have been permitted to run wild, they multiply so quick, that in some places they are become a nuisance.

The Ass is naturally swift, fierce, and formidable; but, when tamed, it presents a very different picture. The moment it's original liberty is lost, it seems to relinquish every claim to freedom, and assumes a meekness and submission even humbler than it's servile situation. It is now the most patient and gentle of all domesticated animals; and suffers with constancy, and perhaps with courage, all the ill treatment which cruelty and caprice undeservedly inflict. It is extremely

temperate,

temperate, as well with respect to the quantity as the quality of it's provisions; being satisfied with the most neglected weeds, and making it's humble repast on the refuse of the horse and other animals. But, notwithstanding this apparent indifference as to food, it is peculiarly delicate in it's water, drinking only at the clearest brooks. It is, in fact, a pattern of abstemiousness, both in drinking and eating; nor does it ever dip it's nose in the stream, as is the practice of the horse. Being seldom saddled, it frequently rolls itself on the grass; and lies down for this purpose whenever opportunity permits, without regarding it's burden. It is extremely averse to water; never rolls in the mud, like the horse; and constantly runs out of it's way, to avoid the dirty parts of a road.

In it's juvenile state, the Ass is sprightly, and even beautiful; but it soon loses these qualifications, either through age or injurious treatment, and becomes slow, stupid, and obstinate. It seems to evince no ardour: except, indeed, that the male is so extremely libidinous,

libidinous, that he has been known to drop down dead immediately after copulation; and that the female is as strongly attached to her young as the male is to her, not being deterred, either by fire or water, from protecting her foal. The Ass is remarkably partial to it's owner, by whom it is too often abused: it scents him at a considerable distance; distinguishes him from others in a crowd; and seems to know the road he has passed, as well as the place he inhabits. When overloaded, it shews the tyrant's injustice, by hanging down it's head, and lowering it's ears; and, on being too hard pressed, opens it's mouth, and draws back it's lips after a very disagreeable manner. If it's eyes are blinded, it immediately becomes motionless; and, on being laid down, so that one eye is concealed in the grass, while the other is covered with a stone or any other article, it continues fixed in the same situation, without attempting to rise, or free itself from these slight impediments. It walks, trots, and gallops, like a horse; but, though it sets out very freely, it is soon weary, and no corporeal inflictions are then capable of making it mend

it's

it's pace. In vain does the unmerciful rider exert his whip, or his cudgel: the poor animal patiently endures all; and, conscious of it's own imbecility, as well as of the inefficacy of resistance, does not even attempt to move.

But, notwithstanding the apparent stupidity of this animal, it is capable of being trained with the same facility as most other quadrupeds; and several Asses have been rendered sufficiently sagacious and active to be exhibited as public spectacles. It is, however, the misfortune of this humble and useful animal, to be despised by man; though it's efforts are exerted to please him, and it's services are so cheaply purchased. The horse is the only favourite; and on him all expence and labour are bestowed: he is fed, attended, and stabled; while the Ass is abandoned to the inhumanity of the lowest rustics, or even to the barbarous sport of children; and, instead of gaining by the lessons it receives, is always a loser. It is forced along by blows; insulted with unnecessary stripes; and overloaded by indolence: and, as it falls generally to the lot of the poor, it largely

largely participates in their wants and distresses. Thus this faithful animal, which would undoubtedly be first of the quadruped kind, were there no horse, is considered as of little value: all it's properties and qualifications being found elsewhere in a higher degree, the creature is entirely disregarded; and, from being naturally the second in the scale of utility, is degraded into the most insignificant of all domestic quadrupeds.

Hence so very little attention has been paid to the improvement of the breed, that it has been suffered to degenerate; and it appears highly probable that the Ass, of all other animals, is the most enfeebled, and rendered most diminutive, by being in a state of domestic servitude. The horse, the cow, and the sheep, are rendered larger by the skill and assiduity of man; while the Ass is permitted to dwindle in every generation. Indeed, it is with us so little valued, that the whole species would probably have been long since extinct, if the medicinal qualities of it's milk had not tempted the avarice of mankind to continue the breed. This salutary liquid is

in

in some cases esteemed the most sovereign, as well as the most innocent, of all prescriptions: it is extremely nourishing and abstergent, and therefore highly valued in hectic complaints, in disorders of the stomach, abscesses of the kidneys, the stone in the bladder, and arthritic pains. It appears to be gently cathartic, and was frequently directed by Hippocrates to be used in large quantities where moderate purging was necessary. When applied as a topic, it renders the gums firm, alleviates arthritic pains, and gives the face an agreeable whiteness.

Were there as much care bestowed on the Ass as commonly falls to the share of the horse, and were the same industry used in crossing the breed and improving it; there is great reason to suppose, that we should soon see the Ass emerge from it's present humble state, and become a very respectable and useful animal.

The Spaniards seem to be better acquainted with the nature of the Ass than any other nation in Europe; and, as they use every necessary

sary precaution to improve the breed in Spain, it is no unusual thing to meet with an animal of this species full fifteen hands high.

The Ass seems to have been originally a native of Arabia, and other parts of the east; and warm climates still produce the largest and best. Their size and spirit both evidently decline on their removal into colder regions.

In Persia there are two kinds of Asses: one of which, used for burdens, is slow and heavy; the other, which is kept for the saddle, being stately and nimble. They are managed in the same manner as horses; except that the rider sits nearer the crupper: and, like them, they are taught to amble. Their nostrils are generally enlarged, in order to allow them more room for breathing; and one of them is frequently sold for a sum equal to forty or fifty pounds of our money. The Persians, indeed, so highly esteem the flesh of this animal, that it's delicacy is even proverbial among them. When fresh killed, it is hot and unsavoury; but, being kept some time after it is boiled, is said to become excellent food.

food. The flesh of the tame Ass, however, is more dry, tough, and disagreeable, than even that of the horse; and, according to Galen, it is very unwholesome.

The Ass is not only more hardy than the horse, but liable to fewer diseases; and it is less subject to be infested with vermin than any other hairy animal; probably, on account of the dryness and hardness of it's skin. Like the horse, it takes three or four years in arriving at a state of perfection; and frequently lives to the age of twenty or twenty-five. It sleeps very little, and never lies down for that purpose till quite worn out with fatigue. The female goes about eleven months with young, and never brings forth more than one at a time. The mule may be engendered between a stallion and an Ass, or between an Ass and a mare; but the latter breed is every way preferable, being larger, stronger, and better shaped.

The skin of the Ass being extremely hard and elastic, it is used for many different purposes; particularly, in the manufacture of shagreen,

shagreen, drums, shoes, and a thick parchment for the leaves of pocket-books. Buffon says, there is also a probability that the bones of this animal are harder than those of others; since the ancients made flutes of them, and they were found shriller than those made with other bones.

The Ass is, perhaps, the animal which, in proportion to it's size, can carry the greatest weight; and, as it costs but little to feed it, and scarcely requires any care, it is of considerable use in many drudgeries which would otherwise occupy the horse. Indeed, it is less liable to start, or stumble, than that noble animal; and is found serviceable at our mines, in situations scarcely accessible to the horse. In countries where the earth is light, the Ass is frequently put to the plough, and it's dung is an excellent manure.

Though the common tame Ass is of different brown shades, from nearly white to almost black, it is generally of a dun, greyish, ash-colour; the lines along the back and over the shoulders,

shoulders, which form the cross that characterises this animal, being of a dark or dusky chocolate hue. The knees, too, are commonly marked with the same dark colour.

The Ass, though a theme of vulgar scorn, has received much honourable notice from men of genius and learning, as well ancient as modern, in almost every country.

CRESTED LONG TAILED PYE.

*Published Dec.r 29. 1798. by Harrison, Cluse & Co. N.o 78. Fleet Stree*

# CRESTED LONG-TAILED PYE.

THIS curious and beautiful bird is said, by some naturalists, to be the Muscicapa Paradisi of Linnæus. The bill is of a dark ash-colour, pretty straight, sharp-pointed, and angled; the neck and head are covered with black feathers, reflecting a blue or greenish gloss; and the plumage on the crown forms a crest. The back, wings, and tail, are of a bright reddish cinnamon colour; the tips of the quills are dusky; and the two middle feathers of the tail are longer than the exterior ones at least nine inches. The breast is of a bluish ash-colour; the belly, thighs, and coverts under the tail, are white; and the legs, feet, and claws, are ash-coloured.

Brisson is said to describe the same bird, in three different places of his Ornithology, by the names of the Crested Fly-Catcher of the Cape of Good Hope; the White Fly-Catcher of the Cape of Good Hope; and the Crested Fly-Catcher of Brasil. These three, Buffon says,

says, are really the same: the first and third being males; and the second, which is rather larger, a female; this peculiarity, though principally confined to the birds of prey, obtaining also in the Fly-Catcher, the Moucherolles, and the Tyrants.

In Buffon's description of both male and female, though we see some resemblance of our Crested Long-Tailed Pye, we can by no means discover enough to convince us, that he is speaking of the same bird. He observes, that Klein supposes it to be a Crested Thrush; and Moehring, a Jackdaw: a striking instance, he adds, of the confusion bred by a rage for nomenclature. We have still another, he concludes: Linnæus imagines it to be a Raven; but, as it has a long tail, he calls it Corvus Paradisi, or the Paradise Raven.

Buffon, or his editor, seem to have forgotten that, at the commencement of their account, it is said to be the Muscicapa Paradisi, of Linnæus; consequently, not his Corvus Paradisi.

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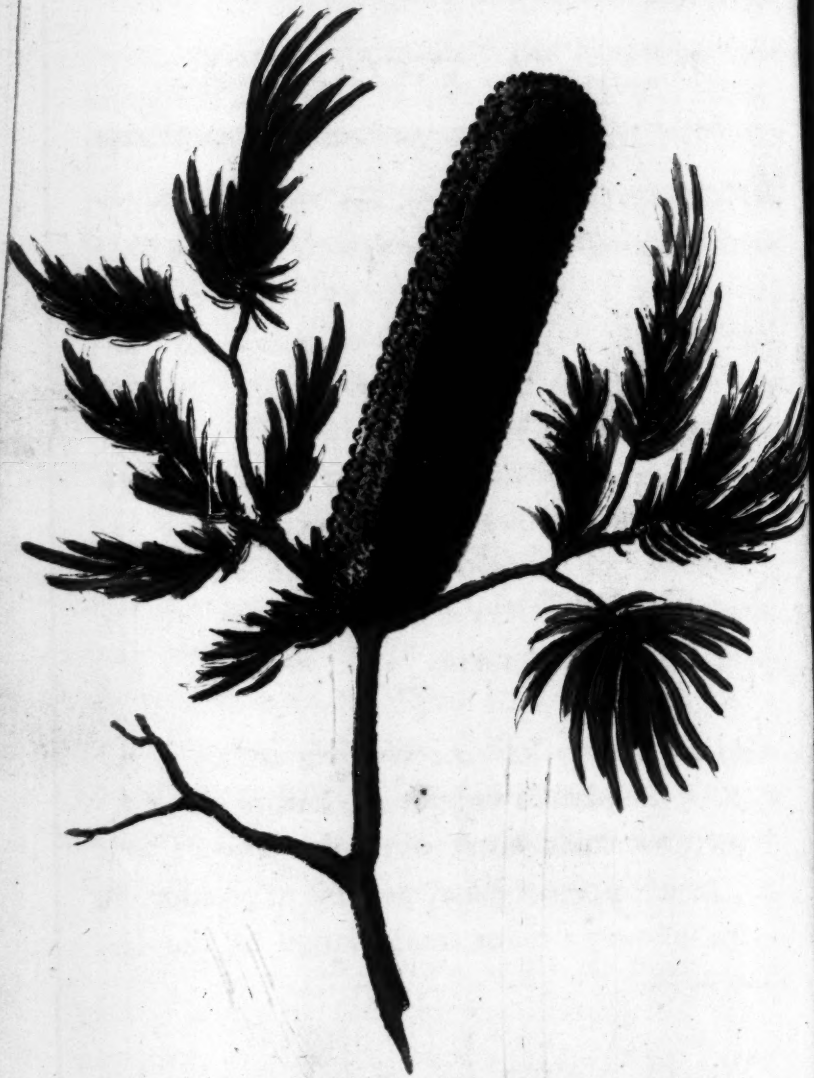

BANKSIA INCOGNITA.

Published Dec. 29. 1798. by Harrison & Co. No. 78. Steel Street.

# BANKSIA INCOGNITA.

THOUGH this plant is one of those New South Wales productions which are called Banksia, it's particular species appears to be unknown by our most distinguished naturalists. The plant they have not seen; and the drawing, though beautiful, and without question an exact representation of nature, as the other performances of the same artist are generally acknowledged to be, still affords no sufficient clue to the most expert botanist for it's decided arrangement.

It appears to have been taken in an early state of the plant's vegetation, before the conglomerated buds burst out into flower; and has, in it's present state, as well in colour as form, no very distant resemblance to the Indian corn.

We are assured, by our friend, who has seen the natural object from which the print is taken, that it has precisely the general effect

fect of the natural plant, which is all the knowledge he pretends to; except, indeed, that the capsules, he well recollects, like those of the other Banksia flowers, greatly abound with honey.

Notwithstanding this dearth of information, respecting what we have denominated the Banksia Incognita, it has been judged a subject likely to prove not unacceptable to the lovers of natural history, by whom it may possibly be hereafter better known.

It is, at least, in our opinion, a pleasing object; and, most certainly, it is a natural one.

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KANGAROO.

Published, Jan.ʸ 1, 1799 by Harrison, Clause, & Co. N.ᵒ 78, Fleet Street.

# KANGAROO.

THE Kangaroo was first discovered by our British navigators on the western side of New Holland, and is yet unknown in any other part of the world. Pennant, who classes it with the Opossums, calls it a Gerboid Kangaru: and, indeed, most naturalists seem inclined to consider it as a species of the Jerboa. Zimmerman, in particular, calls it the Jerboa Gigantea, or Gigantic Jerboa.

It has a small head, neck, and shoulders; and the body regularly increases in thickness to the rump, from whence it again tapers to the tail. The head is oblong, and formed like that of a fawn; the upper lip being divided. The nostrils are wide and open, and the lower jaw is somewhat shorter than the upper.

The pupil of the eyes is of a blueish black, and the irides are dusky. The ears, which are four inches long, are erect, oblongly ovated, rounded and thin at the ends, and covered with short hairs.

The

The hair of the Kangaroo is of a greyish brown colour, somewhat similar to that of the wild rabbit of Great Britain. It is thick and long, when the animal becomes old; but is very slow in it's growth, and for a considerable time resembles a strong down. In some parts, however, the mouth, for example, it begins earlier to be hairy.

This animal's teeth are so singular, that it is impossible to decide, from them, to what class the Kangaroo belongs. It has four broad cutting teeth in the upper jaw; but only two long lanceolated teeth in the lower, which point forwards, and are so placed as to oppose those of the upper. It has also four grinding teeth, in each jaw, remote from the others; and possesses the very singular power of separating the lower incisores, and bringing them again close to each other.

The proportions in some of the parts of this animal bear no analogy to what is common in most others.

The

The fore legs are so very short, as scarcely to reach the nose, and are said to be useless for walking. The hind legs are almost as long as the body, and the thighs are very thick. On the fore feet are five toes, with long conic and strong black claws; but on the hind feet there are only three, the middle toe being very long and thick, like that of an ostrich, and extending far beyond the two others, which are small, and placed very distinct from it. The inner toe of the hind feet is singularly distinguished, by having two small claws; and the bottom and hind parts of the feet, on which the animal often rests, are black, naked, and tuberculated. The tail, which is thick at the base, and tapers to a point, has at the end a strong hard nail, and the hair on it is short and somewhat hard. The tail, though long in the old, is in the young short proportionably to the animal's size. "It would seem," says Mr. White, "to keep pace with the growth of the hind legs, which are the instruments of progressive motion in this animal, and which would also shew that the tail is a kind of second instrument in this action."

The

The scrotum, which is large, and pendulous, is placed before the penis; and the female has, on the belly, an oblong pouch, of a vast depth, the receptacle of her young.

The Kangaroo is frequently more than six feet long, from the nose to the tail. That which is mentioned in Cook's Voyages, as having been shot, weighed eighty-four pounds; yet, on an examination of the grinding teeth, it did not appear to have arrived at it's full growth. Subsequent accounts assure us, that they grow to the weight of a hundred and fifty pounds.

Kangaroo, is the name by which the natives call this extraordinary animal.

It lurks among the grass, feeds on vegetables, and drinks by lapping. It goes chiefly on it's hind legs; making use of the fore feet, as hands, only for digging, or bringing it's food to it's mouth.

The Kangaroo is extremely timid: at the sight of men, it flies from them by amazing leaps;

leaps; springing over bushes seven or eight feet high, and going progressively from rock to rock.

When in motion, this animal carries it's tail quite at right angles with it's body; and, as it alights, often looks back. It is much too swift for greyhounds; and frequently escaped from some of the fleetest of those animals, with which it was hunted, on it's first discovery, by Sir Joseph Banks. The tail is it's weapon of defence; with which it is said to be capable of beating away the strongest dog.

According to our first navigators, the flesh of the Kangaroo is very good eating; but the old ones are reported, by more recent voyagers, to be lean, tough, and coarse.

"In the spring of 1793," says Mr. Pennant, "I had an opportunity of observing the manners of one brought into the capital alive. It was in full health, very active, and very mild and good-natured. On first coming out of

of it's place of confinement, it for a little time went on all fours, but soon assumed an upright attitude. It would sport with it's keeper in a very singular manner: it first placed it's tail in a perpendicular manner; erected it's body on it as a prop; and then, raising it's whole body, darted it's hind legs on the breast of the man. It was capable of striking with great force, if provoked; and it could scratch violently with it's fore claws."

It is, according to Pennant, a very anomalous animal: but has more relation to the Opossum genus than any other; though, in the form of it's legs, he acknowledges, it comes very near to the Javan.

White remarks that, "in it's mode of propagation, it comes nearer to the Opossum than any other animal; although it is not at all similar to it in other respects.

The Kangaroo, we are informed, by a gentleman well acquainted with the animal in it's natural state, becomes domesticated in a very few

few days after it is taken. This curious quadruped, he remarks, if such it can be called, has been found, in the false belly of the mother, perfectly formed, and only the size of a Windsor bean; from which diminutive origin, however, wonderful as it may appear, the animal grows to the weight of a hundred and fifty pounds!

Had we not received this intelligence from a quarter of the most unquestionable authenticity, we should have inclined to an opinion that the size of this young Kangaroo had been erroneously taken from that of the young Kangaroo Rat; a mistake which might have easily happened before these animals were much known, but which can hardly now be supposed possible.

As the fact is, to account for such a phænomenon, would occupy more space than we can possibly devote to even so curious an investigation. The principle, however, we conceive, may be sufficiently traced by analagous enquiries into the secret operations of nature.

The

The Queen has, at Richmond, several Kangaroos, which have bred in England. They are very fond of heat; and one which was brought over in 1797, was sold to an itinerant keeper of animals for thirty guineas.

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GREAT BLACK COCKATOO.

*Published, Jan.5, 1799, by Harrison, Cluse & Co. N°78, Fleet Street.*

# GREAT BLACK COCKATOO

THIS bird, the Psittacus Aterrimus of naturalists, is as large as a maccaw; consequently, one of the largest birds of the parrot kind.

The bill of this bird is strong, very much arched, and of a dusky brown colour; having an angle on each side of the upper mandible. The eyes are of a fine black; and the sides of the head, from the eyes to the under part of the bill, are covered with a red, naked, corrugated skin, which partly covers the inferior mandible. The crest is of a lightish grey colour, the feathers of which are pointed, and reflected upwards at their tips; and this crest is either raised, or depressed, at pleasure, by the bird, in the same manner as the crests of other Cockatoos; so that, sometimes, it is erected prodigiously high, and at others reclined almost close to the head. The whole plumage, from the crest downwards, is of a bluish black, or dark lead-colour; being somewhat deeper on the back and wings, than under the body. The tail, which is pretty long, consists

consists of tapered feathers; and the legs and feet, which are of a brownish black hue, are covered with a rough scaly skin.

The Great Black Cockatoo is a native of Ceylon, and other oriental regions.

Our figure, which is copied from Edwards, was sent from Ceylon to that excellent naturalist; who recognised the same bird, in a collection published by Vander Meulen, at Amsterdam, in the year 1707, which Peter Schenk terms the Indian crow.

Buffon ingeniously enough remarks, that the Great Black Cockatoo may be reekoned the Negro of the Cockatoos, which are in general white.

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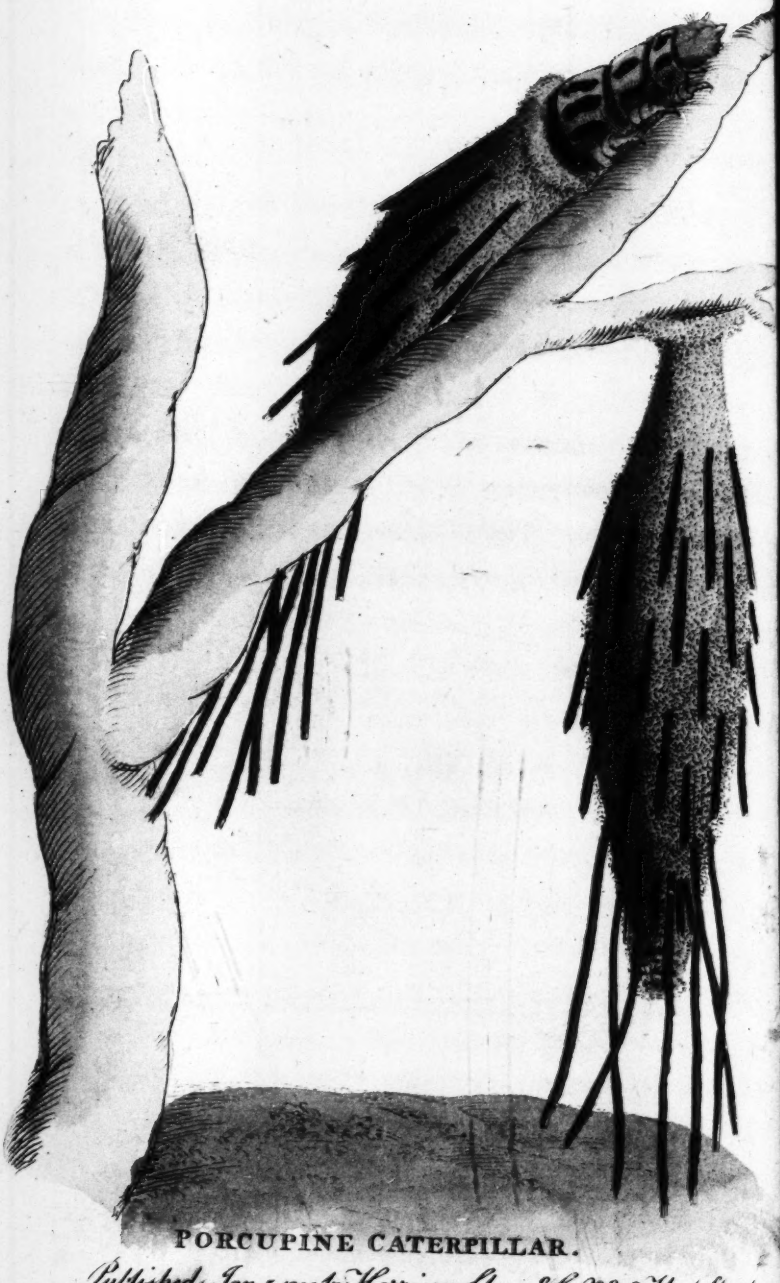


PORCUPINE CATERPILLAR.

Published Jan.s 1799 by Harrison, Cluse & Co. N.o 78. Fleet Street.

# PORCUPINE CATERPILLAR,
## OF NEW SOUTH WALES.

THIS curious Caterpillar, we have denominated the Porcupine, from it's general resemblance, when concealed in it's armed covering, to that quilled animal.

It is a native of New Holland; and the beautiful drawing, which we have copied, was made at Port Jackson, in New South Wales, where this insect is sufficiently common. But though, like other Caterpillars, it certainly undergoes the different changes incident to the tribe, we have not been able to discover to what particular moth or fly it gives birth. We are thankful, however, for such information as we can get, for the present, respecting any non-descript articles, and patiently wait the farther developement of time: a doctrine which we most cordially recommend to our readers; as some information is certainly better than none, and every little commonly gives rise to a little more.

From

From the gentleman who favoured us with the drawing, we have received the following account; which, he says, is all that he knows respecting this very curious insect.

"The Porcupine Caterpillar is a large grub, which weaves for it's residence, and protection from external injuries, a case, the interior of which is, as it were, lined with the finest silk: the exterior is fortified with small pieces of slight twigs, of different lengths, all of which are secured to the case by the gummy juice with which the little reptile spins it's silk.

"To the case there are two apertures, which it opens or closes at pleasure. When the grub wishes to feed, the largest aperture is made use of, from whence the little thing crawls about half way out; instantly retreating, however, into it's case, on the smallest appearance of danger, and at the same instant fastening this end of the covering to whatever it may have been crawling on, whether twig or leaf, by a thread or two of silk. The other aperture is at the farther end, and is used for discharging

discharging it's excrement. It experiences the different changes to which the Caterpillar tribe are subject."

In addition to these particulars, we have also learned that, when any accident happens to the curious case in which this Caterpillar is enveloped, so as to lacerate or tear it in holes, the little animal repairs, with incredible expedition, whatever damage may have been received; so that, in a very few hours, it fills up a large hole with the same silky substance, and this with an exactness so perfect that the nicest eye cannot discern what was the extent of the injury.

The curious covering of this animal we have seen; and, in it's texture, it much resembles the finest fleecy hosiery: it is of a sort of grey ash, or mouse colour; and has the silky softness of a mole skin.

The Caterpillar, which is three inches long, has eleven annulations, or rings, between the head, and the tail or extremity. The first three of these annulations are of a fine yellow,

beautifully

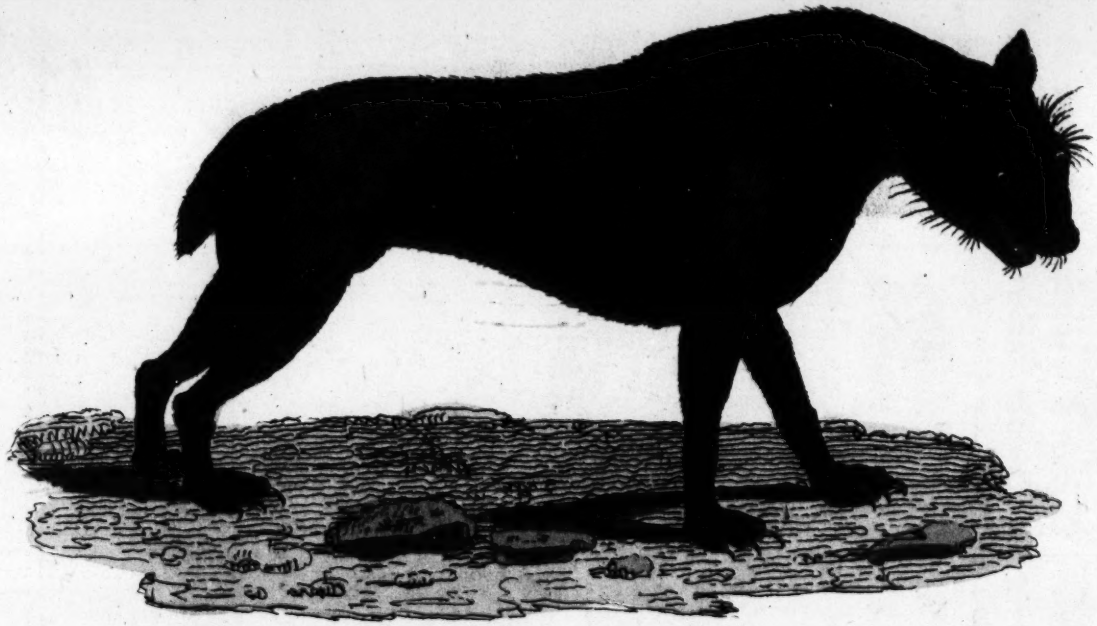
beautifully marked with black or dusky oblong spots; and these annulations have each two claws: the other eight rings are of a dirtyish pale yellow colour; but the part above the vent has the appearance of being covered with a large scale, though it is, in fact, only a substance of the same beautiful spotted yellow as the head and three first annulations.

We are opinion, that the animal seldom crawls out far beyond the third annulation, in pursuit of it's food; from the circumstance of those alone having any claws or feet: though that, we are sufficiently aware, in the Caterpillar race, can by no means be considered as a rule.

This kind of armed covering, it seems, is not quite peculiar to the Porcupine Caterpillar which we have delineated; for, as our friend informs us, there are, in New South Wales, a smaller kind of Caterpillars, or grubs, which make these cases much stronger than the specimen now given; being formed of twigs about an inch in length, laid close together over a case of silk.

It is probable that Nature, whose instincts are always directed to a due preservation of all her offspring, qualifies these insects with the power to form such armed coverings as are likely to have a repulsive effect on the appetites of birds, or other animals; for the purpose of saving from destruction the entire species, which might otherwise fall a prey to their known voracity.

In our annexed print, the Porcupine Caterpillar is seen crawling from it's case on the branch of a Gum Tree; and, underneath, on another part, appears the case alone, attached closely by the chief aperture, to shew the manner in which the little animal instantaneously acts, whenever it is alarmed by the dread of danger.



SPOTTED HYÆNA.

*Published Jan. 12. 1799 by Harrison, Cluse & Co. N. 78. Fleet Street*

# SPOTTED HYÆNA.

THIS species of the Hyæna seems to have been first described by Pennant, as a variety of the Hyæna; though it is mentioned by several earlier writers, under different names. In Bosman's Guinea, it is called the Jackal, or Wild Dog; in Churchill's Collection of Voyages, the Quumbengo; and in Kolben's Cape of Good Hope, the Tiger Wolf.

This animal, which Pennant very properly calls the Spotted Hyæna, he describes to have a large and flat head. Above each eye, there are some long hairs; and, on each side of the nose, very long whiskers. It has a short black mane; and the hair on the body is short and smooth. The ears are short, and a little pointed; their outsides being black, and their insides cinereous. The face and upper part of the head are black: but the body and limbs are of a reddish brown, marked with distinct round black spots, and the hind legs have transverse black bars. The tail is short, black, and full of hair.

This description was taken, by Mr. Penant, from

from an animal shewn some years ago in London, which was considerably larger and stronger than the Common or Striped Hyæna, though possessing the same nature and qualities.

The Spotted Hyæna inhabits Guinea, Æthiopia, and the Cape of Good Hope. It lives in holes in the earth, or clefts of rocks, and preys chiefly by night. It howls horribly; will attack mankind; and even scrapes open graves, to devour the dead. Into sheep-folds it frequently breaks; where, killing two or three sheep, it devours as much as it can, and then carries off another carcase for it's future repast. It has such prodigious strength, that it has been known to seize a female Negro, fling her over it's back, holding her by one leg, and run away with her.

Buffon, Pennant remarks, misled by Bosman's name of this animal, makes it synonymous with the common jackal.

As the Spotted Hyæna was unknown to the ancients, it is not loaded with the many fabulous qualities which have been ascribed to the Common Hyæna.

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HOOPOE.

*Published Jan. 12. 1799, by Harrison, Cluse & Co. N°. 78. Fleet Street.*

# HOOPOE.

THE Hoopoe, or Upupa-Epops of Linnæus, forms a distinct genus of birds, of the order of Picæ, in the system of that celebrated naturalist: the characteristics of which are, that the beak is bent, convex, subcompressed, and in some degree obtuse; the tongue is obtuse, triangular, and very short; and the feet are ambulatory. Linnæus has classed three species under this genus; the Upupa-Epops, the Promerops, and the Bird of Paradise: Buffon also makes three species; but he substitutes the Bee-Eater for the Bird of Paradise.

Belon says, that the Hoopoe has derived it's name from it's large beautiful tuft, Huppe: but, Buffon remarks, a little attention would have convinced him, that it is in reality formed from the Latin Upupa; which name, according to Plautus and St. Jerome, was also given to girls of pleasure. Varro informs us, that the Latin name Upupa is formed from the cry of the bird, Poo, Poo; and the origin is ascribed, as the ancients were accustomed to

ascribe

ascribe the origin of almost every thing, to a fable.

"Tereus, King of Thrace, having ravished Philomela, the sister of his wife Progne, the latter, in revenge, killed her son by him, and served up the flesh at her husband's table. On the discovery of this horrid repast, Progne was transformed into a swallow, Philomela into a nightingale, and Tereus into a Hoopoe; and the latter, still bemoaning his loss, screams πυ, πυ!—or, where, where! where is my son!"

In those dark ages, as they may well be called, when supernatural charms and spells were supposed to have wonderful power over animals which had no rational faculties, as well as those who appear to have been in this respect but little superior, the Hoopoe was considered as prodigiously skilful in defeating the machinations of witches, wizards, and hobgoblins. The female, in consequence of this art, could preserve her offspring from these dreaded injuries. She knew all the plants which defeat fascinations; those which give sight to the blind;

blind; and, more wondrous still, those which open gates or doors, locked, bolted, or barred! Of this last property Ælian gravely relates the following instance: "A man," he says, "having three times successively closed the nest of a Hoopoe, and having remarked the herb with which the bird as often opened it, applied the same herb, and"—he may safely add—"with the same success, to charm the locks of the strongest coffers!"

Such, indeed, are the marvellous qualities of the Hoopoe, if we are to believe all the assertions of ancient authors, that even death only heightens it's virtues, and imparts to them new energies: among the rest, it's heart, it's liver, it's brain, &c. eaten, with the application of certain magical incantations suspended to different parts of the body, produce terrible or pleasing dreams! &c. From these follies our forefathers were by no means free: for, in England, it was long held an unlucky bird, and the forerunner of some public calamity. Nor can all modern nations even yet be exempted; the Swedes, for example, at present, regarding it's appearance as a certain

presage

presage of war. The ancients were better warranted, in considering it's early song as the sign of a good vintage; since this might possibly prove the harbinger of a mild spring, and forward season.

Quitting, however, this enchanted ground, and liberating our readers, as well as ourselves, from the magical circle into which we have been betrayed, we shall proceed to a more sober account of the common Hoopoe.

As this bird has a great abundance of feathers, it appears considerably thicker than it is. It is, in fact, about the size of the misletoe thrush; but looks, while in it's feathers, to be as large as a common pigeon. It weighs from about three to four ounces. The beak is black, slender, and slightly hooked; and the head is adorned with a most beautiful and elegant crest, rising two fingers high, and composed of two series of feathers, which the bird raises and depresses at pleasure: the tips of these feathers are ornamented with black and white, and the rest is of a pale orange-colour. The neck is of a pale reddish-brown hue; the breast

breast and belly are white, variegated with longitudinal streaks, which disappear in the middle as the bird grows older; the tail, which is black, and composed of ten feathers, has in it a white spot of a crescent shape, the horns pointing towards it's extremity. The wings, which are black, transversely streaked with white, do not extend, when folded, to the tail.

In Egypt, the Hoopoes are said to gather in small flocks; in most other countries they appear either single or in pairs only. Sometimes, during the season of their passage, numbers may be found in the same district: but, Buffon says, these are solitary individuals, unconnected by any social tie; and, when hunted, rise one after another. They are scattered through almost the whole of the ancient continent, from Sweden, and even the Orkneys and Lapland, as far as the Canaries and the Cape of Good Hope on the one hand, and the islands of Ceylon and Java on the other; but are only migratory in every part of Europe. They are sometimes found at sea: and excellent observers class them with those birds which twice in the year pass the island of Malta. In some countries,

countries, such as England, they are very rare, and never breed.

Frisch mentions, that they can creep on the bark of trees like the woodpeckers; which is perfectly consistent with analogy, for they also breed in the hollow trunks, as well as in the holes of walls, on the dust usually collected at the bottom of such cavities. It has been often asserted, that the female besmears her nest with excrements of the wolf, of the fox, of the cow, and of all sorts of animals, not excepting human ordure; and that she does this with the view to defend her young by the loathsome stench. But the fact, Buffon asserts, is no more true than the intention; for the Hoopoe never plasters the mouth of her nest like the Nuthatch. At the same time, the nest, he allows, is indeed very dirty and offensive; a necessary consequence of it's great depth, which is often from twelve to even eighteen inches. The young cannot throw out their excrements; and, therefore, grovel a long time among filth: whence, undoubtedly, arose the proverb—"As nasty as a Hoopoe." But this filthiness of the bird only prevails while it's young are rearing; for,

for, at all other times, it is very cleanly. The female usually lays four or five greyish eggs, somewhat larger than those of the partridge.

The cry of the male, who is accused of not feeding the young, is "Bou, bou, bou!" which may be heard at a great distance. Those who have listened attentively to the Hoopoe, pretend to have noticed different inflections and accents, corresponding to it's different circumstances: sometimes a hollow moaning, which foreboded rain; sometimes a shriller cry, indicating a fox in sight, &c. It is said never to drink at springs or brooks; and, for this reason, to be seldom caught in snares. When tamed, however, it plunges it's bill with a brisk motion into the water, but does not repeatedly lift up it's head, like many other birds. It has, probably, Buffon remarks, a power of raising the water into it's gullet by a kind of suction. The brisk motion of the bill he assigns to natural habits in it's mild state, as the act by which it catches insects, crops buds, bores into the earth for worms, and perhaps for humidity too, as well as searches the nests of ants for the eggs. But, though the Hoopoe be with great difficulty

culty ensnared, it is very easily shot. It suffers a near approach; and, notwithstanding it flies in a tortuous course, it's motion is slow. In launching off, it flaps it's pinions, like the lapwing; and when it alights on the ground, walks with an even pace like a common hen.

The Hoopoe, says Buffon, usually leaves our northern climate about the end of August; though one may occasionally be left, which is too young, or too much wounded or enfeebled, to undertake a distant voyage. This, being left behind, may contrive to lodge in the same hole where it nestled; and there pass the winter, in a half-torpid state, requiring little food, and hardly able to repair the loss of feathers occasioned by moulting. A single bird being now and then found in this condition by some hunter, has given rise to the assertion, that all the Hoopoes winter in hollow trees, torpid, and divested of plumage; as has, Buffon remarks, been said of the cuckoo, with just as little foundation.

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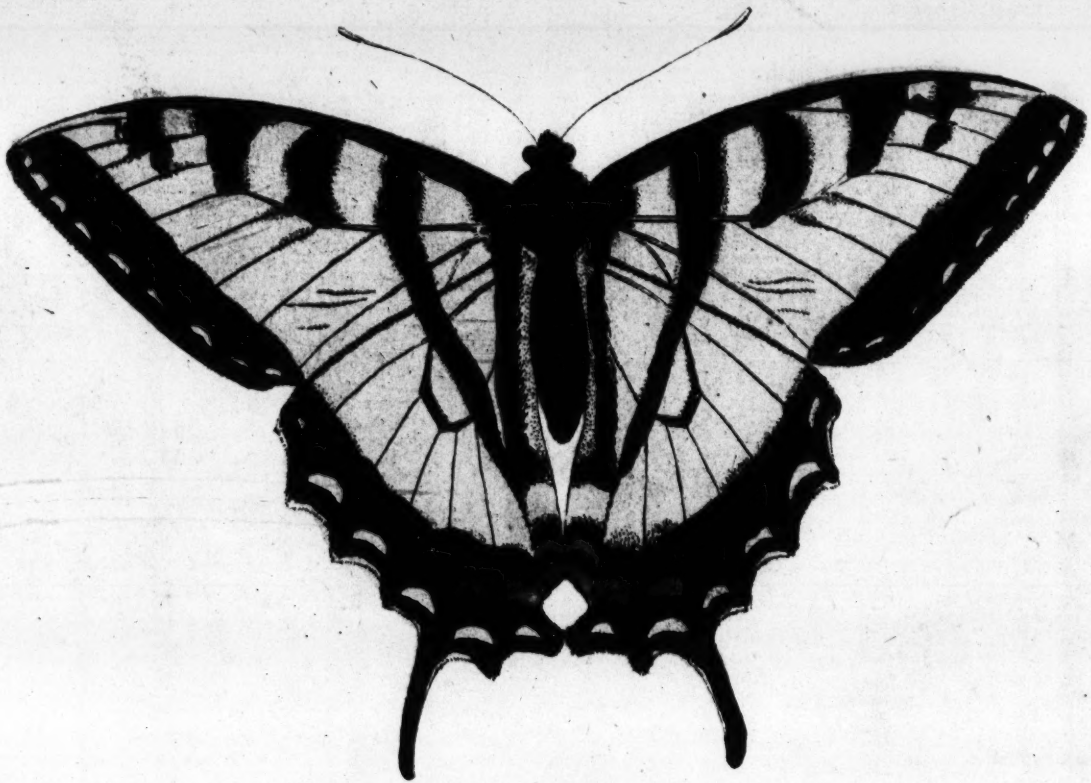

NEW YORK SWALLOW-TAIL.

# NEW-YORK SWALLOW-TAIL.

THIS large and very beautiful Butterfly, though evidently a native of the place from whence it derives it's name, is also found in several parts of the West Indies, as well as North America: nor is it, indeed, very dissimilar from that which we have in England.

The antennæ of the New-York Swallow-Tail are long, the knobs at their extremities being remarkably large. The head, thorax, and abdomen, are black. None of this species have any palpi. The superior wings are of a fine light yellow, a little on the orange tint. The outer or fan-edge has a border of black about a quarter of an inch broad; in which, near the edge, are eight spots of light yellow, one on each membrane. Adjoining to the upper or sector-edge, there are four large black spots; and that which is near the thorax, crossing the superior wing, extends downward through the interior, growing narrower, and indeed losing itself in a misty point,

point, as it approaches the abdominal corners. The inferior wings are of the same colour as the superior ones. On the bar tendon in the middle of each wing, there is a long angular black stroke. The outer or fan-edges have a border of black, almost three-quarters of an inch broad. Near the external edge of each wing, which is denticulated, there are four yellow crescent-like spots; and, near the lower or abdominal corner, there is an eye-like spot, the supposed centre of which is red surrounded with black, and over this there is an arc-like mark of blue, concentric with the red spot. The tails at the lower parts of the wings are nearly three-quarters of an inch long.

The expansion of the wings is four inches and a quarter.

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